

MAGNUM PUBLISHING

MAGNUM PUBLISHING CATALOG 2019

CATALOG 2019

- ▶ Agriculture and Plant Science
- ▶ Biochemistry
- ▶ Biology and Life Sciences
- ▶ Chemistry
- ▶ Computer Science
- ▶ Earth and Environmental Science
- ▶ Economics
- ▶ Education
- ▶ Education and Psychology
- ▶ Engineering and Technology
- ▶ Fisheries and Aquaculture
- ▶ Food Science
- ▶ Food Science and Nutrition
- ▶ Geography
- ▶ Hotel Management
- ▶ Language and Linguistics
- ▶ Library and Information Science
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- ▶ Mass Communication and Journalism
- ▶ Mathematics and Physics
- ▶ Mathematics and Statistics
- ▶ Nanotechnology
- ▶ Psychology & Counselling
- ▶ Social Sciences
- ▶ Veterinary Science



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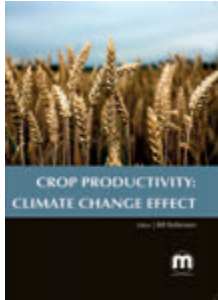


Advances in Agrophysical Research

Contributors: B. Dobrzański, S. Grundas et al.

Agrophysics is a branch of science bordering on agronomy and physics, whose objects of study are the agroecosystem - the biological objects, biotope and biocoenosis affected by human activity, studied and described using the methods of physical sciences. This book presents particular aspects of the contemporary agriculture, starting with the soil characteristics and treatment, plant growth and agricultural products' properties and processing.

Print ISBN: 9781682502655 | \$ 170 | Pub Year: 2016 | Hardcover



Crop Productivity: Climate Change Effect

Editor: Bill Robinson

Crop production can increase if irrigated areas are expanded or irrigation is intensified, but these may increase the rate of environmental degradation. Since climate change impacts on soil water balance will lead to changes of soil evaporation and plant transpiration, consequently, the crop growth period may shorten in the future impacting on water productivity. Crop yields affected by climate change are projected to be different in various areas, in some areas crop yields will increase, and for other areas it will decrease depending on the latitude of the area and irrigation application. This book provides a comprehensive review of literature related to the assessment of climate change impacts on crop productivity using climate, water and crop yield models.

Print ISBN: 9781682500262 | \$ 170 | Pub Year: 2016 | Hardcover

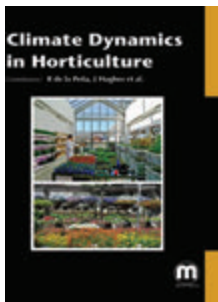


Agricultural Statistical Data

Contributors: Pingguo Yang, Miao Yang et al.

Agriculture plays a vital role in economy of a country. The agricultural statistics is very comprehensive and provides data on a wide range of topics such as crop area and production, land use, irrigation, land holdings, agricultural prices and market intelligence, livestock, fisheries, forestry, etc. It has been subjected to review several times to make it adaptive to contemporary changes in agricultural practices. This book covers a wide range of topics: the economic situation in agriculture, structures, trade, markets, financial aspects, and rural development.

Print ISBN: 9781682500255 | \$ 170 | Pub Year: 2016 | Hardcover

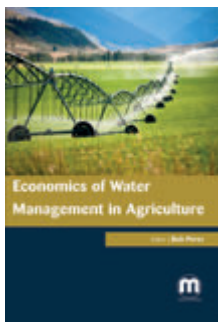


Climate Dynamics in Horticulture

Contributors: R de la Peña, J Hughes et al.

Climate change and increased climate variability in terms of rising temperatures, shifting rainfall patterns, and increasing extreme weather events, such as severe drought and devastating floods, posture a hazard to the production of agricultural and horticultural crops. This book gives an introduction to recent trends about the climate change effects on horticulture, provides information regarding important fruit crops, flowers, spices, and plantation crops. The book is a tremendous resource for researchers; instructors; students in agriculture, horticulture and environmental science.

Print ISBN: 9781682500279 | \$ 170 | Pub Year: 2016 | Hardcover

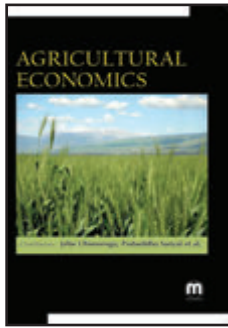


Economics of Water Management in Agriculture

Editor: Bob Perez

Water is an extremely complex resource. It is both a public and a private good; it has multiple uses; the hydrology requires that we examine potential productivity gains at both the farm and the basin levels; both quantity and quality are important. The purpose of this book is to lay down some of the concepts and complexities in economic analyzes related to increasing water productivity, to provide some examples and to see what this implies regarding the potential for increasing water productivity. This book examines economic issues relating to the relationship between water and agriculture, with a special focus on irrigation.

Print ISBN: 9781682500286 | \$ 170 | Pub Year: 2016 | Hardcover

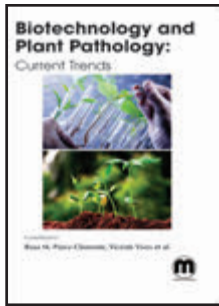


Agricultural Economics

Contributors: John Ulimwengu, Prabuddha Sanyal et al.

Agricultural economics (or agronomics) is concerned with the application of economic theory in optimizing the production and distribution of food and fibre. Agronomics was a branch of economics that specifically dealt with land usage. Today, the field of agricultural economics has transformed into a more integrative discipline which covers farm management and production economics, rural finance and institutions, agricultural marketing and prices, agricultural policy and development, food and nutrition economics, and environmental and natural resource economics. This book covers the whole of agribusiness that means economic relations of suppliers and producers of inputs for agriculture and food industry, problems from the aspects of social economy and rural sociology and finally the economics of the population nutrition.

Print ISBN: 9781682500422 | \$ 170 | Pub Year: 2016 | Hardcover



Biotechnology and Plant Pathology: Current Trends

Contributors: Rosa M. Pérez-Clemente, Vicente Vives et al.

Plant biotechnology ushers in a new era for plant scientists working to maintain healthy plants, optimize crop yields, and minimize pesticide usage. One of the ultimate aims of agricultural biotechnology is to feed an expanding world population. Considering the rapid pace with which biotechnology has been advancing in its progress, it comes as no surprise that plant pathology today has undergone vast changes. The study of plant diseases, their causes and the changes they produce in the cells, tissues and organs has been greatly aided by the continual enhancement of biotechnology principles and processes, particularly that of genetic engineering. This book provides current developments and advances in the field of plant pathology and biotechnology, particularly within the context of the widening scope of such arenas as biochemistry. Emphasizing upon the principles, techniques, and processes associated with it, the text gives space to covering critical perspectives which look into the future prospects, challenges and advantages offered by these trends.

Print ISBN: 9781682500514 | \$ 170 | Pub Year: 2016 | Hardcover

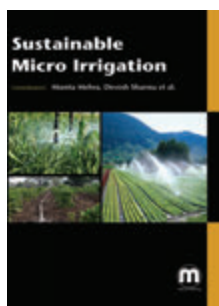


GIS Applications in Agriculture

Editor: Bobby Hall

GIS application in agriculture has been playing an increasingly important role in crop production throughout the world by helping farmers in increasing production, reducing costs, and managing their land resources more efficiently. GIS application in agriculture such as agricultural mapping plays a vital role in observing and management of soil and irrigation of any given farm land. GIS agriculture and agricultural mapping act as an essential tools for management of agricultural sector by acquiring and implementing the accurate information into a mapping environment. GIS application in agriculture also helps in management and control of agricultural resources. GIS agriculture technology helps in improvement of the present systems of acquiring and generating GIS agriculture and resources data. This book examines methods and ways that GIS technology can help farmers produce a plenty of crops with more efficacy and at lower costs.

Print ISBN: 9781682500293 | \$ 170 | Pub Year: 2016 | Hardcover

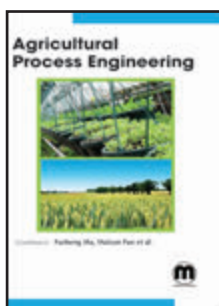


Sustainable Micro Irrigation

Contributors: Mamta Mehra, Devesh Sharma et al.

Water for food production is obviously one of the major challenges of the 21st Century. With increased agricultural production, irrigated land has increased in the arid and subhumid zones around the world, and this, in conjunction with the increasing demand for water and energy for agriculture, has made the need for alternate methods of water management. The book focuses on the principles as well as recent advances and applications of micro irrigation techniques.

Print ISBN: 9781682500309 | \$ 170 | Pub Year: 2016 | Hardcover

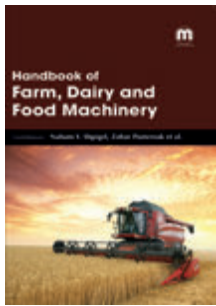


Agricultural Process Engineering

Contributors: Fusheng Ma, Haiyan Fan, et al.

Agricultural engineering is the engineering discipline that applies engineering, science and technology to agricultural production and processing. Agricultural engineering combines the disciplines of mechanical, civil, electrical and chemical engineering principles with a knowledge of agricultural principles according to technological principles. Agricultural engineers may perform tasks such as planning, supervising and managing the building of dairy effluent schemes, irrigation, drainage, flood and water control systems, performing environmental impact assessments, agricultural product processing and interpret research results and implement relevant practices. This book covers the engineering processes related to agriculture.

Print ISBN: 9781682500521 | \$ 170 | Pub Year: 2016 | Hardcover



Handbook of Farm, Dairy, and Food Machinery

Contributors: Nahum Y. Shpigel, Zohar Pasternak et al.

Milk as processed on farm is transformed into a vast array of products: fluid milks and creams, evaporated and dried products, yogurt and fermented milk products, butter, milk ice-cream and cheese. The machinery involved in all of these is as varied as products themselves. The process of getting food from “farm to fork,” as the saying goes, involves more than planting, harvesting, shipping, processing, packaging and distributing—though those are all key components. Effective and efficient food delivery systems are built around processes that maximize the effort while minimizing cost, time, and resource depletion. This book covers inclusive fundamental food engineering principles in the design of food industry machinery.

Print ISBN: 9781682500538 | \$ 190 | Pub Year: 2016 | Hardcover

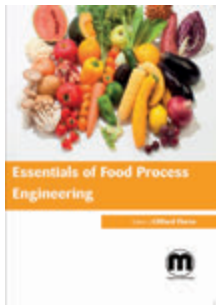


Cell and Molecular Biology of Plants

Contributors: Katja Meyer, Tino Koester et al.

Cell and Molecular Biology of plants is an interdisciplinary field that deals with the gene methodology for identification of mutation and the methodology for isolation of nucleic acids from all types of organisms, such as fungi and plants. This book provides reader with an understanding of the manifold life processes in plants at biochemical, molecular, cellular and physiological levels. It includes the text coverage of theoretical explanatory approaches, principles and methods in the life sciences as well as the distinctive features of the molecular life processes in plants. The focus of the work is on the in-depth scientific investigation of the molecular mechanisms that control the processes of plant development and adaption to biotic and abiotic environments and enable the interplay of the developmental and adaptive processes.

Print ISBN: 9781682501276 | \$ 170 | Pub Year: 2016 | Hardcover

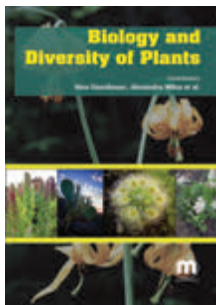


Essentials of Food Process Engineering

Editor: Clifford Flores

Food engineering includes, but is not limited to, the application of agricultural engineering, mechanical engineering and chemical engineering principles to food materials. Food engineering encompasses a wide range of activities. Food engineers are employed in food processing, food machinery, packaging, ingredient manufacturing, instrumentation, and control. This book covers the important topics which are extensively used in food process industry. The book also focuses on challenges to employ modern tools, technology, and knowledge in food processing.

Print ISBN: 9781682500545 | \$ 170 | Pub Year: 2016 | Hardcover



Biology and Diversity of Plants

Contributors: Nico Eisenhauer, Alexandru Milcu et al.

Biological diversity of plants ensures a resource for new food crops and medicines. This is invaluable because it balances ecosystems, protects watersheds, mitigates erosion, moderates climate, and provides shelter for animals. This book discusses theoretical approaches to the biological systems theory and problem of plant diversity and also presents precision farming techniques.

Print ISBN: 9781682501290 | \$ 170 | Pub Year: 2016 | Hardcover



Biofertilizer Technology

Editor: David Diaz

Biofertilizer is a substance which contains living microorganisms which, when applied to seed, plant surfaces, or soil, colonizes the rhizosphere or the interior of the plant and promotes growth by increasing the supply or availability of primary nutrients to the host plant. Biofertilizers add nutrients through the natural processes of nitrogen fixation, solubilizing phosphorus, and stimulating plant growth through the synthesis of growth-promoting substances. Biofertilizers can be expected to reduce the use of chemical fertilizers and pesticides. Biofertilizers provide eco-friendly organic agro-input and are more cost-effective than chemical fertilizers. This book details on the technology of biofertilizer, uses and benefits of biofertilizer and its impact on environment.

Print ISBN: 9781682500729 | \$ 170 | Pub Year: 2016 | Hardcover

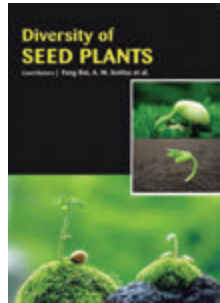


Taxonomy

Contributors: Sarah J. Higginbotham, A. Elizabeth Arnold et al.

Taxonomy is the practice and science of organism classification. It is the science of defining groups of environmental organisms on the basis of shared characteristics and giving names to those groups. This book illustrates the key role played by taxonomy in the conservation and sustainable utilization of environmental diversity.

Print ISBN: 9781682501306 | \$ 170 | Pub Year: 2016 | Hardcover

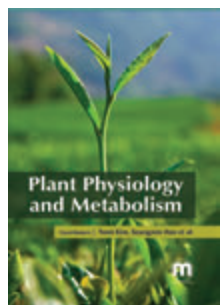


Diversity of Seed Plants

Contributors: Fang Bai, A. M. Settles et al.

Seed plants, including gymnosperms and angiosperms, have come to dominate modern landscapes and make up the great majority of plant biodiversity. This book provides the different types of diversity of seed plants.

Print ISBN: 9781682501375 | \$ 170 | Pub Year: 2016 | Hardcover



Plant Physiology and Metabolism

Contributors: Yumi Kim, Seungmin Han et al.

Plant physiology and metabolism are a sub-discipline of botany concerned with the functioning, or physiology, of plants. It includes the study of all the internal activities of plants those chemical and physical processes associated with life as they occur in plants. This book focuses on the principles of plant physiology and metabolism from the molecular level to whole plants, on the mechanisms of plant-environment interactions.

Print ISBN: 9781682501313 | \$ 170 | Pub Year: 2016 | Hardcover

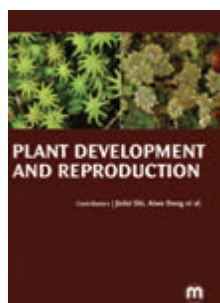


Plant Physiology, Biochemistry, and Biotechnology

Contributors: Susanne Berger, Alok K. Sinha et al.

Plants produce a vast array of chemical compounds with unique properties which they use to cope with their environment. The biotechnology of plant is the art and science of changing the traits of plants in order to produce desired characteristics. This book focuses on the plants physiology, plant biochemistry and biotechnology effects.

Print ISBN: 9781682501382 | \$ 170 | Pub Year: 2016 | Hardcover



Plant Development and Reproduction

Contributors: Jinlei Shi, Aiwu Dong et al.

Development and reproduction of plants are the techniques of new individuals or offspring in plants, which can be accomplished by sexual or asexual reproduction. Plants have evolved different reproductive strategies for the continuation of their species. This book covers the overview of plant reproduction at the research and professional level, also consists of physiological and molecular control of the plants floral transition development.

Print ISBN: 9781682501320 | \$ 170 | Pub Year: 2016 | Hardcover



Microbiology and Plant Pathology

Contributors: Rong Liu, Jiasen Cheng et al.

Plant pathology is the scientific study of diseases in plants caused by pathogens and environmental conditions. Whereas plant microbiology and plant pathology is the study of the interactions between microorganisms and plants and plant pathogens. This book describes how transgene expression is controlled in plants and how advanced information strategies can be used to manipulate and modify the plant genome.

Print ISBN: 9781682501399 | \$ 170 | Pub Year: 2016 | Hardcover



Plant Ecology

Contributors: David Y. P. Tng, Greg J. Jordan et al.

Plant ecology is a sub-discipline of ecology which studies the distribution and abundance of plants, the effects of environmental factors upon the abundance of plants. This book investigates plant structure and behavior across the ecological spectrum and follows a bottom-up approach, from the more specific, detailed studies focusing on plant organs to the broadest ecosystem approaches.

Print ISBN: 9781682501337 | \$ 170 | Pub Year: 2016 | Hardcover

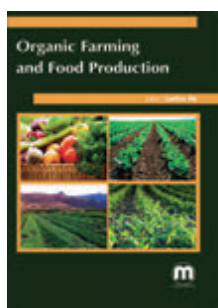


Transgenic Plants: Advances and Limitations

Contributors: Nikon Vassilakos et al.

Transgenic plants are the ones, whose DNA is modified using genetic engineering techniques. The aim is to introduce a new trait to the plant which does not occur naturally in the species. A transgenic plant contains a gene or genes that have been artificially inserted. The inserted gene sequence is known as the transgene, it may come from an unrelated plant or from a completely different species. The purpose of inserting a combination of genes in a plant, is to make it as useful and productive as possible. Development of efficient transformation protocols is becoming a complementary strategy to conventional breeding techniques for the improvement of crops. Transgenic Plants: Advances and Limitations covers the recent advances carried on improvement of transformation methods together with assessment of the impact of genetically transformed crops on biosafety.

Print ISBN: 9781682502709 | \$ 170 | Pub Year: 2016 | Hardcover

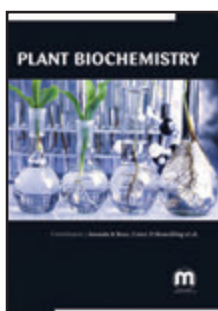


Organic Farming and Food Production

Editor: Lanfen Hú

Organic farming does not mean going “back” to traditional methods of farming. Organic farming is a form of agriculture that relies on techniques such as crop rotation, green manure, compost, and biological pest control. Organic food is food which is produced using environmentally and animal friendly farming methods on organic farms. This book provides an in-depth knowledge in organic farming and food production systems.

Print ISBN: 9781682502679 | \$ 170 | Pub Year: 2016 | Hardcover

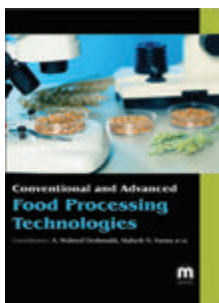


Plant Biochemistry

Contributors: Amanda K Broz, Corey D Broeckling et al.

Plant Biochemistry is not only an important field of basic science explaining the molecular function of a plant, but also an applied science that is in the position to contribute to the solution of agricultural problems. This book provides on the plant sciences with a concise general account of plant biochemistry and also there is a strong emphasis on plant metabolism as well as enzymology.

Print ISBN: 9781682501566 | \$ 170 | Pub Year: 2016 | Hardcover

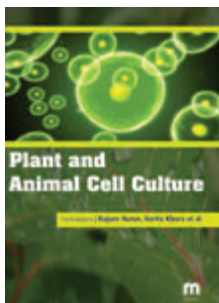


Conventional and Advanced Food Processing Technologies

Contributors: A. Waheed Deshmukh, Mahesh N. Varma et al.

Food processing and technology includes a set of physical, chemical or microbiological methods and techniques used to transmute raw ingredients into food and its transformation into other forms in food processing industry. It is the transformation of raw ingredients, by physical or chemical means into food, or of food into other forms. This book introduces a range of conventional and advance processing techniques that are used in food processing and also in manufacturing.

Print ISBN: 9781682502235 | \$ 180 | Pub Year: 2016 | Hardcover



Plant and Animal Cell Culture

Contributors: Rajeev Nema, Sarita Khare et al.

Cell culture is the process by which cells are grown under controlled conditions, generally outside of their natural environment. In practice, the term "cell culture" now refers to the culturing of cells derived from multicellular eukaryotes, especially animal cells, in contrast with other types of culture that also grow cells, such as plant tissue culture, fungal culture, and microbiological culture. The historical development and methods of cell culture are closely interrelated to those of tissue culture and organ culture. This book emphasizes on theoretical and practical knowledge of the basic techniques in plant and animal cell culture.

Print ISBN: 9781682501573 | \$ 170 | Pub Year: 2016 | Hardcover

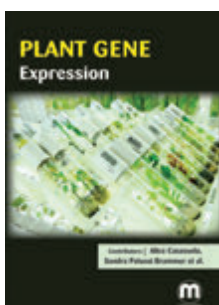


Cane-Based Biofuel and Bioproducts

Contributors: Murillo Villela Filho, Carlos Araujo et al.

A biofuel is a fuel that is produced through contemporary biological processes, such as agriculture and anaerobic digestion. The development of new fuels and bioproducts derived from cane crops has been discussed in this text. This book provides broad-ranging coverage of sugarcane biology, biotechnological advances, and breakthroughs in production and processing techniques.

Print ISBN: 9781682502402 | \$ 180 | Pub Year: 2016 | Hardcover

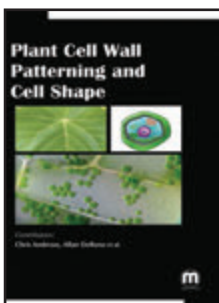


Plant Gene Expression

Contributors: Alice Casassola, Sandra Patussi Brammer et al.

Whole-transcriptome analysis is very important in understanding how altered expression of genetic variants contributes to complex plant phenotypes. Life technologies offers an extensive product portfolio for gene expression analysis. Plant researchers utilize a variety of approaches to understand gene expression. In some cases, whole-transcriptome profiling is preferred to targeted RNA sequencing, which generally involves panels. In order to study plant functional genomics, researchers also utilize epigenetic tools as well as plant miRNA, small RNA, and RNAi studies to decipher the root cause behind phenotypes of interest. This book covers some of the common and recent features of plant gene expression and its regulation. Though it is difficult to describe every gene regulation, the book provides an overview of various classes of genes that are expressed in plants in general and the mechanism of their regulation.

Print ISBN: 9781682502228 | \$ 170 | Pub Year: 2016 | Hardcover



Plant Cell Wall Patterning and Cell Shape

Contributors: Chris Ambrose, Allan DeBono et al.

The plant cell wall is a tough, flexible and sometimes rigid layer that surrounds some types of cells. It surrounds the cell membrane and provides these cells with structural support and protection. The walls of plant cells must have sufficient tensile strength to withstand internal osmotic pressures of several times atmospheric pressure that result from the difference in solute concentration between the cell interior and external water. This book focuses on the diverse function of cell walls in plant development, intercellular communication, and defining cell shape.

Print ISBN: 9781682502419 | \$ 170 | Pub Year: 2016 | Hardcover

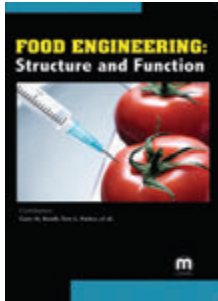


Weed and Pest Control: Conventional and New Challenges

Contributors: G.R. Mohammadi et al.

Weed control is the botanical component of pest control, which attempts to stop weeds, especially noxious or injurious weeds in undesirable place, from competing with domesticated plants and livestock. Many strategies have been developed in order to contain these plants. This book covers insect control strategies, tactics in integrated pest management of opportunistic generalist insect species, biological control of root pathogens, and insect pest control by polyculture strategy, application of several integrated pest management programs, irrigation tactics and soil physical processes, and carbon stocks to manage weeds.

Print ISBN: 9781682502662 | \$ 170 | Pub Year: 2016 | Hardcover

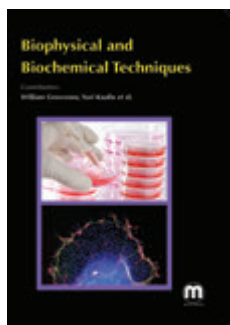


Food Engineering: Structure and Function

Contributors: Gary M. Booth, Tory L. Parker et al.

Food engineering embraces, but is not restricted to, the application of agricultural engineering, mechanical engineering and chemical engineering principles to food products and services. Food engineers are responsible for the technological knowledge transfer important to the cost-effective production and promoting of food products and services. The book reveals of developing food engineering based on well-established principles, the benefits of developing the field by bringing together experts from industry, development, and applications of food engineering principles.

Print ISBN: 9781682502693 | \$ 170 | Pub Year: 2016 | Hardcover

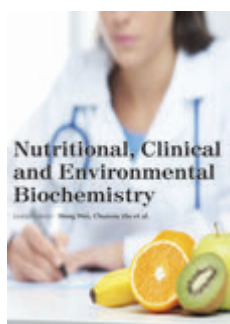


Biophysical and Biochemical Techniques

Contributors: William Grosvenor, Yuri Kaulin et al.

Biochemistry is an interdisciplinary science that systematically integrates principles of mathematics, physics and chemistry to explain distinctive features of life processes in terms of structure-function correlations. Advances in biochemistry owe mainly to exploitation of principles and techniques used in physical sciences. Combination of biochemistry, cell biology, and microbiology, in the recent past, to form molecular biology has led to great advances in understanding and control of biological processes in medicine, agriculture and pharmacology, and food industries. During the recent past, biochemical methods have become specialized and sophisticated and proper understanding of the technique in its use in biochemical investigations is very important to arrive at any meaningful result. This book envisages various techniques used in chemistry to probe the structure of biological systems.

Print ISBN: 9781682501412 | \$ 170 | Pub Year: 2016 | Hardcover

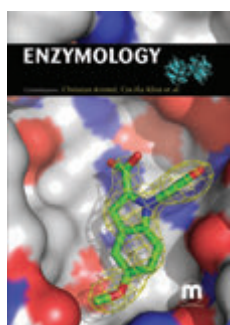


Nutritional, Clinical, and Environmental Biochemistry

Contributors: Heng Wei, Chunxiu Hu et al.

Nutritional, Clinical, and Environmental Biochemistry offers a core emphasis on the scientific fundamentals of nutrition and metabolism throughout the lifespan from the molecular to the organism level. The concentration in nutritional biochemistry links nutrigenomics, nutrigenetics, and biotechnology with human health, regulation of metabolism, and the pathophysiology of inherited and chronic disease. Clinical chemistry relates to clinical chemistry, molecular biology and genetics, therapeutic drug monitoring and toxicology, laboratory immunology and laboratory medicine in general. Chemistry and biochemistry for a clean environment is an important focus of the societal challenges and to develop methodologies that ensure a clean and healthy environment.

Print ISBN: 9781682501436 | \$ 170 | Pub Year: 2016 | Hardcover



Enzymology

Contributors: Christian Krintel, Cecilia Klint et al.

Enzymology is the study of enzymes, their kinetics, structure, and function, as well as their relation to each other. Regulation of enzymes and enzyme production are also covered in enzymology, as are the roles of inhibitors and promoters of enzyme activity. This book consists of the fundamentals of enzymology and describes the role of enzymes in food, agricultural and health sciences.

Print ISBN: 9781682501429 | \$ 170 | Pub Year: 2016 | Hardcover

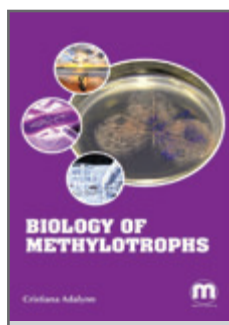


Microbial Biochemistry

Contributors: Raman Gurusamy, Sakthivel Natarajan et al.

Microbial Biochemistry allows the formulation of concepts that turns out to be important in the study of higher organisms and analyses the mechanisms by which cells obtain the energy necessary for their growth, glycolysis, the pentose phosphate pathway, the tricarboxylic, and the cataplerotic cycles. This book covers the principles and importance of microbes, their growth as well as their effects on our environment at large and human health in particular.

Print ISBN: 9781682501528 | \$ 170 | Pub Year: 2016 | Hardcover

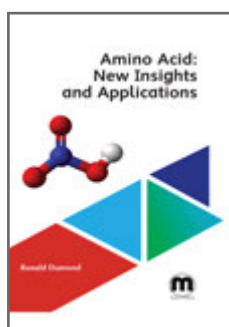


Biology of Methylophs

Editor: Cristiana Adalynn

Both plant and environmental factors are involved in shaping the methyloph community on plants. This book is not intended to provide a comprehensive review of metabolism of methylophic bacteria. Instead this book focuses on significant recent discoveries that are both refining and transforming the current understanding of methyloph as a metabolic phenomenon. The book also examines new directions in methyloph ecology that improve our understanding of the role of methyloph in global biogeochemical processes, including the future challenges in the field perspective.

Print ISBN: 978-1-68250-500-7 | \$155 | 2019 | Hardcover



Amino Acid: New Insights and Applications

Editor: Ronald Dumond

Major amino acids for the food and animal feed industries are today produced on a very large scale using fermentation or synthetic processes. This book provides useful information on new aspects of amino acid structure, synthesis reactions, dietary application in animals, and metabolism in plants. The therapeutic use of amino acids presents a viable and important option for natural medicine. This book will appeal to practicing researchers, academics, PhD students and other scientists.

Print ISBN: 978-1-68250-501-4 | \$155 | 2019 | Hardcover

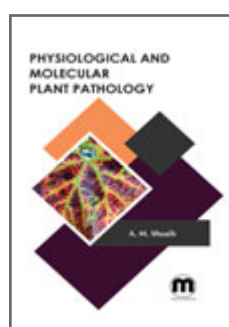


Biological Activities and Action Mechanisms of Licorice Ingredients

Editor: Ying Ning Wong

This book introduces licorice as alternative medicine, its application in the industry, licorice ingredients and their antioxidant; proposes the possible molecular mechanism by which licorice ingredients induce anti-inflammatory, antifibrosis, antihepatitis, and antileishmanial activity. The book is also aimed to highlight the current understanding of the mechanism of bioactive constituents of licorice, which potentiates them as antileishmanial agents. Additionally, it also brings to light the importance of folk medicine in curing diseases and thereby gives impetus to explore ancient medicines and their mode of actions to use them progressively to cure diseases.

Print ISBN: 978-1-68250-502-1 | \$150 | 2019 | Hardcover

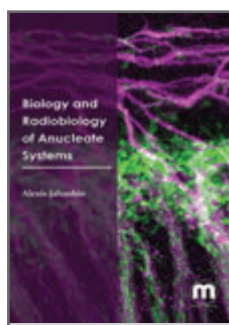


Physiological and Molecular Plant Pathology

Editor: A. M. Shuaib

In recent years, great progress has been made related to the molecular basis underlying host-pathogen interactions. Rapid and accurate detection of fungal pathogens to species or strain level is often essential for disease surveillance and implementing a disease management strategy. This book reviews the direct and indirect disease identification methods currently used in agriculture. The book should prove useful to students, researchers, and experts in the area of conservation biology, genetic diversity, and molecular biology.

Print ISBN: 978-1-68250-503-8 | \$150 | 2019 | Hardcover

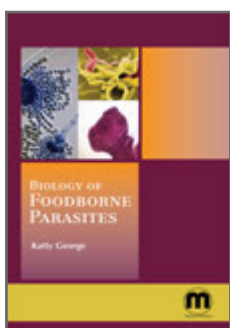


Biology and Radiobiology of Anucleate Systems

Editor: Alexis Jahanbin

Human body is built of about one trillion cells. Anucleate cells of *Acetabularia* are capable of performing morphogenesis over a period of more than four weeks after removal of the nucleus. This book describes the methods for the isolation and characterization of anucleate mammalian cells and the techniques for the fusion of anucleate and nucleated cells; and outlines certain of the potential experimental applications of anucleate mammalian cell systems. The book will be very useful for students and beginners to gain insight into new area, as well as for experts and scientists to find new facts and expand their scientific horizons through biological sciences and biomedicine.

Print ISBN: 978-1-68250-504-5 | \$155 | 2019 | Hardcover



Biology of Foodborne Parasites

Editor: Katy George

Foodborne parasitic diseases are an important cause of illness and economic loss world-wide. Over the past decade there has been a growing recognition of the involvement of the home in several public health and hygiene issues. This book covers state-of-the-art review on significant progress and outlines key biological techniques applied to foodborne parasitic pathogens research. This book explores the different types of foodborne parasites, the dynamics of parasite transmission in different food sources, and the prevention and control of foodborne parasites in the food chain.

Print ISBN: 978-1-68250-505-2 | \$150 | 2019 | Hardcover

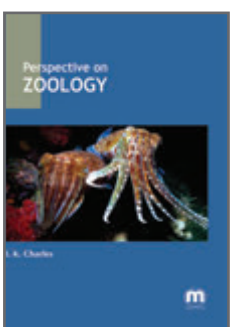


Biology of Fishes

Editor: K D Carlos

During the past years, the molecular biology of fish has been intensively investigated in all aspects of fisheries, including diseases, genetics, nutrition, and ecology. The book covers comprehensive information relevant to the central theme of fish biology and aims to bring together an overall picture of the research in progress and to provide international communication among researchers in many disciplines with a common interest in the biology of fish. Coverage can include articles on any field of fish biology where the emphasis is placed on adaptation, function or exploitation in the whole organism.

Print ISBN: 978-1-68250-506-9 | \$150 | 2019 | Hardcover

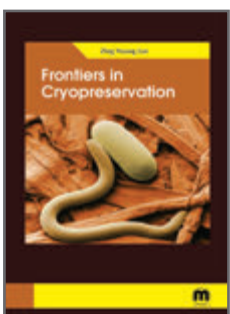


Perspective on Zoology

Editor: I. K. Charles

Animals provide important model species for studies of ecological genetics, macroevolution, physiological ecology and behavioral ecology among many other fields. This collection tries to discuss in a critical way some of the aspects of biology that lack perspective. The text is recommended for students and researchers that deal with biology, zoology, genetics, and evolution who not only wish to explore and understand other approaches to popular theories in zoology, but also wish to be more familiarized and delve deeper with the common yet frequently discussed and debated topics in the field.

Print ISBN: 978-1-68250-492-5 | \$155 | 2018 | Hardcover

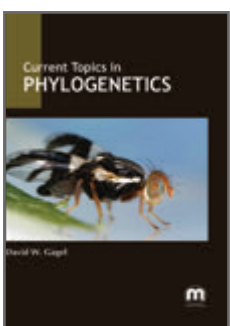


Frontiers in Cryopreservation

Editor: Zing Nyung Lee

Cryopreservation is the use of very low temperatures to preserve structurally intact living cells and tissues. Unprotected freezing is normally lethal and this collection seeks to analyze some of the mechanisms involved and to show how cooling can be used to produce stable conditions that preserve life. Additionally, it discusses the conceptually new cryobiological ideas, and introduce the recently emerged practical protocols for cryopreservation.

Print ISBN: 978-1-68250-493-2 | \$155 | 2018 | Hardcover

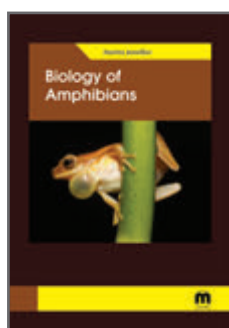


Current Topics in Phylogenetics

Editor: David W. Gagel

Phylogenetics is the area of research concerned with finding the genetic connections and relationships between species. In this literature, phylogenetics and phylogeography of a diverse range of organisms are reviewed: from microorganisms causing gastroenteritis in humans, fishes in the Southwest Atlantic Ocean and spiders of the western Indian Ocean, to mountain Tapirs in South America and Birch tree species of the Arctic tundra.

Print ISBN: 978-1-68250-494-9 | \$155 | 2018 | Hardcover



Biology of Amphibians

Editor: Marina Jennifer

All amphibians are cold-blooded animals and most metamorphose from a juvenile to an adult form. They cannot generate their own body heat, instead relying on the temperature of their environment to help them keep warm or cool enough to survive. In addition, amphibians can help mankind to more confidently face and address other major environmental challenges. This book is dominant reference on all aspects of amphibian biology, including their life history, ecology, morphology, and evolution.

Print ISBN: 978-1-68250-495-6 | \$155 | 2018 | Hardcover



Handbook of Morphometrics

Editor: C R Clinton

Analysis of size and shape has always figured largely in interpretations of multivariate analyses of measurements on organisms, although on premises that are not always unchallengeable. Morphometrics is an active research area and there are new methods proposed to address the limitations of methods introduced in this literature. New methods, in particular those based on the study of landmarks, have made it easier to parameterize shape in this way, to visualize shape change and test hypotheses statistically. This book will be of interest for students, practitioners, as well as researchers.

Print ISBN: 978-1-68250-496-3 | \$150 | 2018 | Hardcover

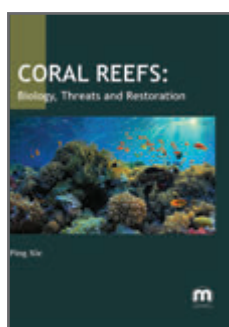


Biomacromolecular Mass Spectrometry

Editor: Paul K. Sung

Biomolecular mass spectrometry has become a major analytical technique in recent years driving the biosciences forward at the same time. This book brings together research and articles in the fields of biomacromolecules such as proteins, DNA, and other biopolymers studied with mass spectrometry and peripheric techniques. Research tends to be more and more interdisciplinary, and this work attempts to bridge all biomacromolecules in an effort to enhance communication among scientists.

Print ISBN: 978-1-68250-497-0 | \$150 | 2018 | Hardcover

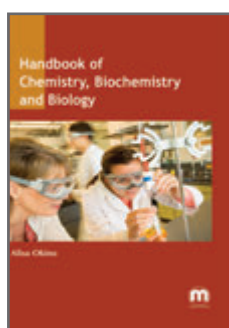


Coral Reefs: Biology, Threats, and Restoration

Editor: Ping Xie

Coral reefs are the most diverse of all marine ecosystems. They are so diverse, that are often called the rainforests of the sea. This book provides an integrated overview of the design, physiology, ecology, and behavior of coral reef organisms. It examines the biological aspects of coral reefs and the importance of their existence. Environmental threats to coral reefs are reviewed, and ways in which the coral reef ecosystem can be restored are also discussed. Particular emphasis is presented on conservation and management due to the habitat's increasingly endangered status.

Print ISBN: 978-1-68250-498-7 | \$155 | 2018 | Hardcover



Handbook of Chemistry, Biochemistry, and Biology

Editor: Alisa Okino

This book brings together of physics, chemistry and biology with integration of mathematics and with practical applications in medicine and agriculture. The book is devoted to these topics contributed by renowned contributors. It describes the chemical and physicochemical properties of these glucans and their derivatives and the molecular biological and structural aspects of the enzymes involved in their formation and breakdown. It also includes information about biological activity of different enzymes in process of oxidation in vivo and in vitro, investigation of the properties of lipids in plants and in animals.

Print ISBN: 978-1-68250-499-4 | \$155 | 2018 | Hardcover



Bioenergetics

Editor: David Joos

Important field of biochemistry that concerns energy flows through living systems and involved in making and breaking of chemical bonds in the molecules found in biological organisms. This book consists the collection of disciplines within biochemistry and physiology that aims at a description and understanding of the function of living systems.

Print ISBN: 978-1-68250-393-5 | \$150 | 2017 | Hardcover

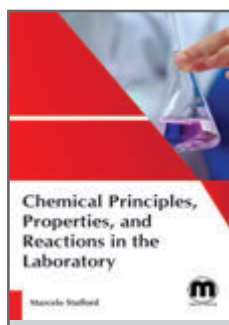


General and Applied Microbiology

Editor: S.P. Braun

Microbiology is the study of microscopic organisms, those being unicellular, multicellular. Microbiology encompasses numerous sub-disciplines including virology, mycology, parasitology, and bacteriology. Microbiology is often incorrectly classed as the study of germs or of bacteria. Applied microbiology is a scientific discipline that deals with the application of microorganisms and the knowledge about them. Applications include biotechnology, agriculture, medicine, food microbiology, and bioremediation.

Print ISBN: 978-1-68250-394-2 | \$150 | 2017 | Hardcover

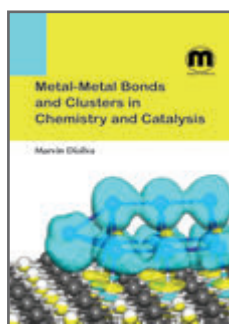


Chemical Principles, Properties, and Reactions in the Laboratory

Editor: Marcelo Stafford

Wide ranges of chemicals are used in research laboratories of the Institute, each with its own inherent hazards. An understanding of chemical principles is important in the solution of many problems in the associated disciplines, those that rely on the core ideas of chemistry for their success. This book covers state of the art information on chemical principles as well as techniques.

Print ISBN: 978-1-68250-507-6 | \$155 | 2019 | Hardcover

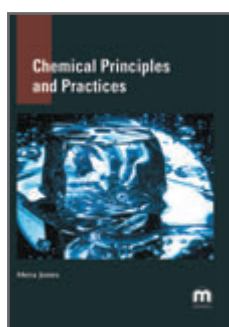


Metal-Metal Bonds and Clusters in Chemistry and Catalysis

Editor: Marvin Disilva

The existence of metal-metal bond is mainly because of the presence of $(n+1)s$, $(n+1)p$ and nd orbitals as valence shell electronic configuration. This book presents state of the art research and reviews on current status and future trends in modern chemical research concerned with chemical structure and bonding. This book covers topics on the developments in the study of metal clusters held by metal-metal bonds.

Print ISBN: 978-1-68250-508-3 | \$155 | 2019 | Hardcover

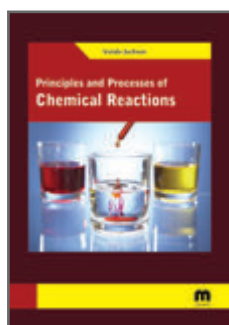


Chemical Principles and Practices

Editor: Mera Jones

In everyday life, the use of chemistry is evident in a person's environment; in the preparation of food, different household products and in the manufacture of cosmetic and pharmaceutical supplies. These products are all made through different chemical reactions. The foods people prepare contain substances like baking soda and vinegar, which are examples of a base and acid, respectively. This comprehensive guide is a compilation of original researches and rapid communications by renowned experts, spanning topics in the chemical sciences.

Print ISBN: 978-1-68250-447-5 | \$150 | 2018 | Hardcover



Principles and Processes of Chemical Reactions

Editor: Vonda Jackson

A chemical reaction is a process that is usually characterized by a chemical change in which the starting materials (reactants) are different from the products. Chemical reactions tend to involve the motion of electrons, leading to the formation and breaking of chemical bonds. The material in this book deals with the principles and processes of chemical reactions. This work is intended to examine the nature of chemical change in the hope of recognizing and setting forth the basic principles that help us to understand why they occur.

Print ISBN: 978-1-68250-448-2 | \$155 | 2018 | Hardcover



Food Chemistry Principles

Editor: Pamela Adams

An understanding of the chemical processes that take place in foods has made food supplies available on a global scale. This work is an ambitious attempt to cover the whole of food chemistry. The importance of food chemistry lies in its ability to counter the effects of decomposition and spoilage and extend the shelf life of foods. Researchers, industrialists, and students alike will find this book as an essential tool to understand the importance of food composition.

Print ISBN: 978-1-68250-449-9 | \$155 | 2018 | Hardcover



Issues in Advanced Organic Chemistry

Editor: Mindy Campbell

Organic chemistry developed into a productive and exciting science in the nineteenth century. Over the years organic chemists have developed a broad array of reactions that allow them to make all kinds of complex products from simpler starting materials. Synthetic organic chemistry remains an integral part of medicinal chemistry design, enabling the most carefully designed target compounds to be realized in a rapid and efficient manner. This comprehensive book explores the problems encountered in the study of the various facets of organic chemistry, including syntheses, reactions, reagents, and reaction mechanisms.

Print ISBN: 978-1-68250-450-5 | \$155 | 2018 | Hardcover

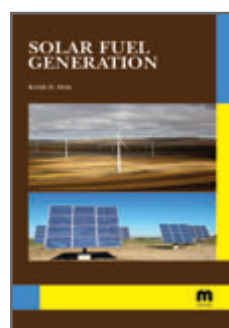


Biominerallization: Characterization of Biominerals and Biomimetic Materials

Editor: Y. Gribble

The concept of biomimesis has long been used in chemistry in the context of compounds with enzymelike catalytic action. This literature describes how strategies used by nature to build and tune the properties of biominerals have been applied to the synthesis of materials for biomedical, industrial, and technological purposes. Bio-inspired approaches such as molecular templating, supramolecular templating, organized surfaces, and phage display as well as methods to replicate the structure and function of biominerals are discussed.

Print ISBN: 978-1-68250-462-8 | \$150 | 2018 | Hardcover

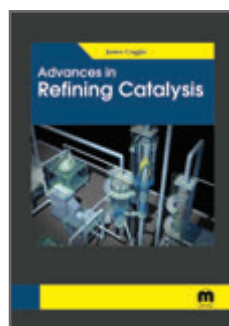


Solar Fuel Generation

Editor: Krrish D. Hein

Solar production and use of fuels is an integral part of any large scale solar energy strategy. This book presents an overview of the development, state-of-the-art, and growth perspectives of this emerging field and highlights recent advances in photocatalyst design with a particular focus on structure-property-activity relationships. Solar fuel generation has attracted vast research interest as an environmentally benign means of producing energy from sunlight for catering to the ever growing world energy demands. This book will be of interest for students, researcher, as well as renewable energy professionals.

Print ISBN: 978-1-68250-463-5 | \$155 | 2018 | Hardcover



Advances in Refining Catalysis

Editor: James Coggin

Catalysts have been very significant developments from the days of using natural clays as catalysts for catalytic cracking to designing and producing catalysts with precise control of their structure, composition, and properties for fluid catalytic cracking (FCC). This literature introduces new advances in catalysts for selected processes such as FCC, hydrotreatment of FCC gasoline, hydroprocessing of vacuum gas oil, alkylation, processing of heavy bottoms of crude oils, hydrogen production, and the roles of catalyst supports

Print ISBN: 978-1-68250-464-2 | \$155 | 2018 | Hardcover

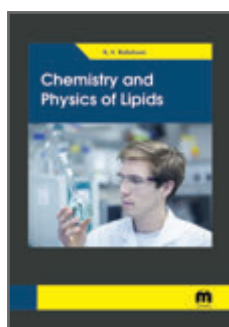


Photochemical Water Splitting: Materials and Applications

Editor: R C Peter

In the development of new energy sources, hydrogen is one of the most attractive fuels for the 21st century. This book emphasizes the basic principles of solar water splitting and highlights recent developments with semiconductor light absorbers and co-catalysts. The role of combinatorial approaches in identifying new metal oxide visible light-absorbing semiconductors will be described, and the potential of using nanomaterials for more efficient devices will be discussed. This issue will also focus on recent developments in water splitting concepts.

Print ISBN: 978-1-68250-465-9 | \$155 | 2018 | Hardcover



Chemistry and Physics of Lipids

Editor: K Y Robinson

This work presents chemical and physical aspects of lipids with primary emphasis on the relationship of these properties to biological functions and to biomedical applications. The chapters in this book are contributed by renowned researchers with a long-standing experience in different research areas. Researchers have found that lipids have a much more diverse and widespread biological role in the body in terms of intracellular signaling or local hormonal regulation etc. This book will appeal to a broad audience, not only scientists but also people with general background in many different biological sciences.

Print ISBN: 978-1-68250-466-6 | \$150 | 2018 | Hardcover



Chemical Data Collections

Editor: Dongling Fan

Chemical Data provides ongoing market research and analysis for the plastics, petrochemical, and petroleum industries. Chemical databases are becoming a powerful tool in drug discovery also. Database searches based on possible requirements for biological activity can identify compounds that might be suitable for further analysis or indicate novel ways to achieve the desired activity. This book delivers information about chemical and crystal structures, spectra, reactions and syntheses, and thermophysical data.

Print ISBN: 978-1-68250-467-3 | \$150 | 2018 | Hardcover

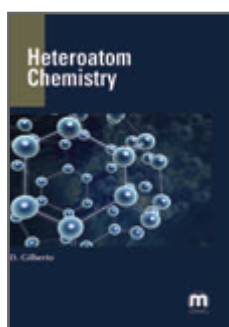


Coloration Technology

Editor: Y.M. Bruce

We live in a colorful world and the use of colors helps to complement this environment. Before the development of modern technology, colors primarily came from substances found in nature, such as indigo, turmeric, paprika and saffron. But as the 20th century loomed, new kinds of colors appeared that offered marketers wider coloring possibilities. This work is intended to endorse innovation and fundamental considerate in the science and technology of colored materials by providing a medium for communication of peer-reviewed research papers of the highest quality.

Print ISBN: 978-1-68250-468-0 | \$150 | 2018 | Hardcover

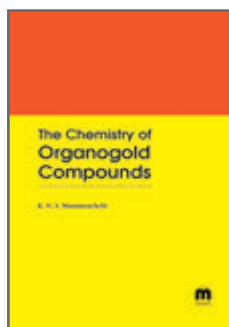


Heteroatom Chemistry

Editor: D. Gilberto

A knowledge of heterocyclic chemistry is useful in biosynthesis and in drug metabolism as well. Nucleic acids are important in biological processes of heredity and evolution. There are a large number of synthetic heterocyclic compounds with additional important applications and many are valuable intermediates in synthesis. This collection comprehensively discuss the properties, synthetic methods, emerging applications, and the present status of various aspects of this important topic to assist a better understanding of heteroatom materials. Heterocyclic compounds occur widely in nature and in a variety of non-naturally occurring compounds. A large number of heterocyclic compounds are essential to life.

Print ISBN: 978-1-68250-469-7 | \$150 | 2018 | Hardcover



The Chemistry of Organogold Compounds

Editor: K. N. S. Wanniarachchi

Organogold chemistry is enjoying a resurgence of interest as useful applications, largely physical or medicinal, are being found. It has opened the door for a wide range of methods and applications in the field of nanoscience and materials science. There is also a wide range of novel molecules, some with curious structures. This book focuses on methods and applications of organogold compounds in organic synthesis, reflecting the enormous progress which has been made in the use of gold compounds as reagents and catalysts.

Print ISBN: 978-1-68250-478-9 | \$155 | 2018 | Hardcover



The Chemistry of Organoiron Compounds

Editor: Nicolo Martin

Organoiron chemistry is the chemistry of iron compounds containing a carbon-to-iron chemical bond. Although iron is generally less active in many catalytic applications, it is less expensive and “greener” than other metals. Organoiron compounds feature a wide range of ligands that support the Fe-C bond; as with other organometals, these supporting ligands prominently include phosphines, carbon monoxide, and cyclopentadienyl, but hard ligands such as amines are employed as well. This book covers a range of articles highlighting the use of organoiron compounds as reagents and as catalysts.

Print ISBN: 978-1-68250-479-6 | \$155 | 2018 | Hardcover

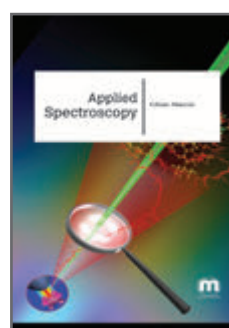


The Chemistry of Organozinc Compounds

Editor: James J. Smith

Organozinc chemistry is the science of organozinc compounds describing their physical properties, synthesis and reactions. Organozinc compounds were among the first organometallic compounds made. They are less reactive than many other analogous organometallic reagents, such as Grignard and organolithium reagents. The present work deals with the preparation of organozinc compounds and their applications.

Print ISBN: 978-1-68250-480-2 | \$155 | 2018 | Hardcover

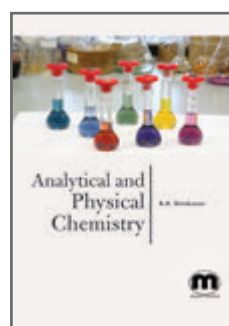


Applied Spectroscopy

Editor: Glenn Marcov

Applied spectroscopy is the application of various spectroscopic methods for detection and identification of different elements/compounds in solving problems in the fields of forensics, medicine, oil industry, atmospheric chemistry, pharmacology, etc. This book delineates practical, tested, general methods for ultraviolet, visible, and infrared spectrometry in clear language for novice users, and serves as a reference resource for advanced spectroscopists.

Print ISBN: 978-1-68250-392-8 | \$155 | 2017 | Hardcover

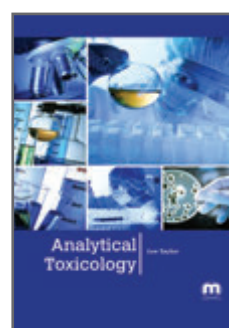


Analytical and Physical Chemistry

Editor: R.R. Brinkman

Analytical chemistry studies and uses instruments and methods used to separate, identify, and quantify matter. Analytical chemistry consists of classical, wet chemical methods and modern, instrumental methods. Physical chemistry is the study of macroscopic, atomic, subatomic, and particulate phenomena in chemical systems in terms of laws and concepts of physics. It applies the principles, practices and concepts of physics such as motion, energy, force, time, thermodynamics, quantum chemistry, statistical mechanics and dynamics, equilibrium. This book offers extensive coverage of the principles and practices of analytical and physical chemistry.

Print ISBN: 978-1-68250-388-1 | \$155 | 2017 | Hardcover

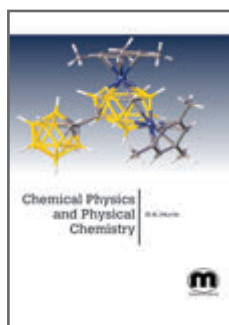


Analytical Toxicology

Editor: Lee Taylor

Analytical toxicology is the detection, identification, and measurement of foreign compounds in biological and other specimens. Analytical methods are available for a very wide range of compounds: these may be chemicals, pesticides, pharmaceuticals, drugs of abuse and natural toxins. This book provides a comprehensive, thorough, clear, up to date and practical treatment of analytical toxicology at a high standard.

Print ISBN: 978-1-68250-389-8 | \$155 | 2017 | Hardcover



Chemical Physics and Physical Chemistry

Editor: D.K. Morin

Chemical physics is a subdiscipline of chemistry and physics that investigates physicochemical phenomena using techniques from atomic and molecular physics and condensed matter physics; it is the branch of physics that studies chemical processes from the point of view of physics. Physical chemistry is the study of macroscopic, atomic, subatomic, and particulate phenomena in chemical systems in terms of laws and concepts of physics. This book introduces possibly unfamiliar areas, explains important experimental and computational techniques, and describes modern endeavors.

Print ISBN: 978-1-68250-390-4 | \$155 | 2017 | Hardcover



Biomolecules, Polymers, and Drugs

Editor: Charles Aigner

A biomolecule is any molecule that is present in living organisms, including large macromolecules such as proteins, carbohydrates, lipids, and nucleic acids, as well as small molecules such as primary metabolites, secondary metabolites, and natural products. A polymer is a large molecule, or macromolecule, composed of many repeated subunits. A drug is any substance other than food, that when inhaled, injected, smoked, consumed, absorbed via a patch on the skin or dissolved under the tongue causes a physiological change in the body. This book deals with biomolecules, polymers, and drugs.

Print ISBN: 978-1-68250-391-1 | \$155 | 2017 | Hardcover

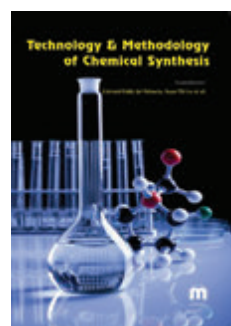


Chemistry and Molecular Sciences: Advances

Contributors: Dongling Zhan, Lei Yu et al.

Chemistry and Molecular Sciences: Advances integrates ideas and techniques that span the boundaries of traditional chemical and biological sciences and explores phenomena controlled by events at the molecular level. Whether it be actual molecules, such as proteins and synthetic polymers, or macro-processes such as biofilm formation or medical imaging with acoustics, at their core, all phenomena occur through molecular processes. The molecular scale uses its own language, which the molecular chemistry center aims to encompass, covering everything from inorganic chemistry to chemical biology via organic chemistry.

Print ISBN: 9781682500507 | \$170 | Pub Year: 2016 | Hardcover

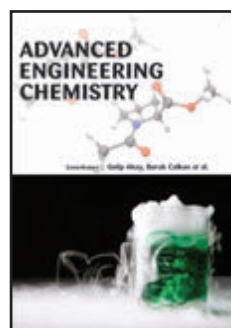


Technology & Methodology of Chemical Synthesis

Contributors: Gérard Eddy Jai Poinern, Xuan Thi Le et al.

Chemical synthesis is the process by which many substances important to daily life are obtained. It is applied to all types of chemical compounds, but most syntheses are of organic molecules. Chemists synthesize chemical compounds that occur in nature in order to gain a better understanding of their structures. Synthesis also enables chemists to produce compounds that do not form naturally for research purposes. In industry, synthesis is used to make products in large quantity. This book covers key concepts associated with the synthesis and design of organic and inorganic molecules, molecular architecture and the energy transformations associated with chemical and physical processes.

Print ISBN: 9781682500736 | \$170 | Pub Year: 2016 | Hardcover

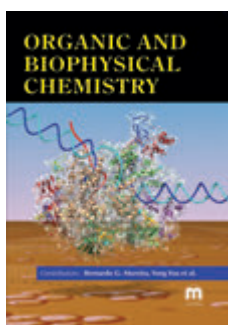


Advanced Engineering Chemistry

Contributors: Galip Akay, Burak Calkan et al.

Chemical engineering, applies physical sciences and life sciences together with applied mathematics and economics to produce, change, transport, and properly use chemicals, materials and energy. Essentially, chemical engineers design large-scale processes that transform chemicals, raw materials, living cells, microorganisms and energy into useful forms and products. This book presents the fundamental principles of chemistry with strong emphasis on experiments, applications and topics in engineering and the problems created by chemical processes. This book can be used by practicing engineers, chemists and scientists in engineering chemistry and chemical engineering.

Print ISBN: 9781682500583 | \$180 | Pub Year: 2016 | Hardcover

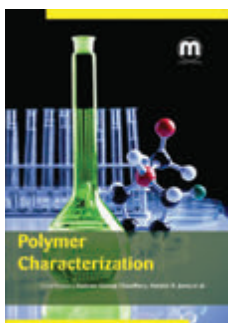


Organic and Biophysical Chemistry

Contributors: Bernardo G. Moreira, Yong You et al.

Organic chemistry is a chemistry sub-discipline involving the scientific study of the structure, properties, and reactions of organic compounds and organic materials and whereas Biophysical chemistry is a physical science that uses the concepts of physics and physical chemistry for the study of biological systems. This book provides the methods of both organic and biophysical chemistry.

Print ISBN: 9781682501467 | \$170 | Pub Year: 2016 | Hardcover

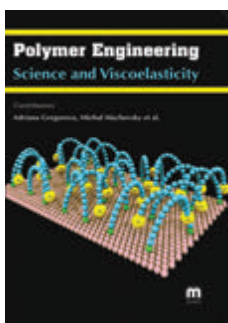


Polymer Characterization

Contributors: Ratiram Gomaji Chaudhary, Harjeet D. Juneja et al.

Polymer characterization is the analytical branch of polymer science. The discipline is concerned with the characterization of polymeric materials on a variety of levels and this characterization typically has as a goal to improve the performance of the material. Its techniques are typically used to determine molecular mass, molecular structure, morphology, thermal properties, and mechanical properties. This book explains physical principles and characterization without heavy theory and gives special emphasis to the application of the techniques to polymers, with plenty of illustrations.

Print ISBN: 9781682501856 | \$170 | Pub Year: 2016 | Hardcover

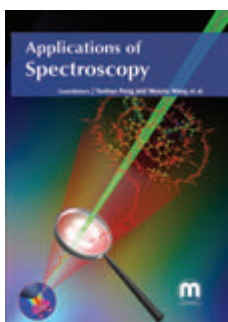


Polymer Engineering Science and Viscoelasticity

Contributors: Adriana Gregorova, Michal Machovsky et al.

Polymer engineering is generally an engineering field that designs, analyzes, and/or modifies polymer materials. Polymer engineering covers aspects of petrochemical industry, polymerization, structure and characterization of polymers, properties of polymers, compounding and processing of polymers and description of major polymers, structure property relations and applications. Viscoelasticity is the property of materials that exhibit both viscous and elastic characteristics when undergoing deformation. This book envisages a unified mechanics and materials perspective on polymers; both the mathematics of viscoelasticity theory as well as the physical mechanisms behind polymer deformation processes.

Print ISBN: 9781682500750 | \$170 | Pub Year: 2016 | Hardcover

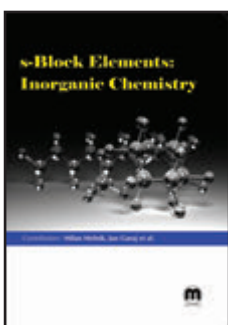


Applications of Spectroscopy

Contributors: Yankun Peng and Wenxiu Wang et al.

Study of the interaction between matter and electromagnetic radiation and used to refer to the measurement of radiation intensity as a function of wavelength and are often used to describe experimental spectroscopic methods. Its data is often represented by a spectrum, a plot of the response of interest as a function of wavelength or frequency. This book consists of the useful application of spectroscopy.

Print ISBN: 9781682501597 | \$170 | Pub Year: 2016 | Hardcover

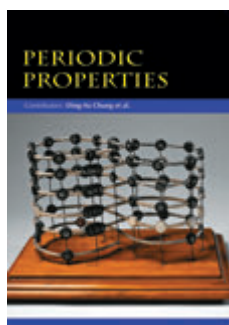


s-Block Elements: Inorganic Chemistry

Contributors: Milan Melnik, Jan Garaj et al.

The s-block is one of four blocks of elements on the periodic table. The s-block group have a common property. The electron in their most outward electron shell are in the s-orbital. Elements in the s-block are in the first two periodic table groups. The elements in group one are called the alkali metals. The elements in group two are called the alkaline earth metals. The book details the structure and properties of s-block elements.

Print ISBN: 9781682501634 | \$160 | Pub Year: 2016 | Hardcover

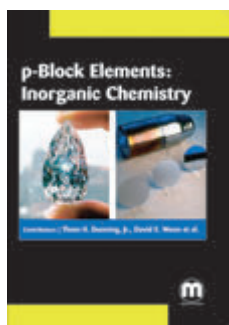


Periodic Properties

Contributors: Ding-Yu Chung et al.

This book exhibits trends or periodicity of the elements. These trends can be predicted using the periodic table and can be explained and understood by analyzing the electron configurations of the elements. This book deals on the atomic radius, electron affinity, electronegativity and also ionization energy of the elements.

Print ISBN: 9781682501610 | \$170 | Pub Year: 2016 | Hardcover

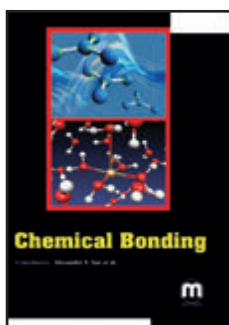


p-Block Elements: Inorganic Chemistry

Contributors: Thom H. Dunning, Jr., David E. Woon et al.

The p-block of the periodic table consists of the elements of groups 13, 14, 15, 16, 17 and 18. These elements are characterized by the filling up of electrons in the outermost p-orbitals of their atoms. The principal quantum number "n" fills the p orbital. There is a maximum of six electrons that can occupy the p orbital. Some of these elements and their compounds play an important role in our daily life. The book reveals the structure, characteristics, and properties of p-block elements.

Print ISBN: 9781682501641 | \$160 | Pub Year: 2016 | Hardcover

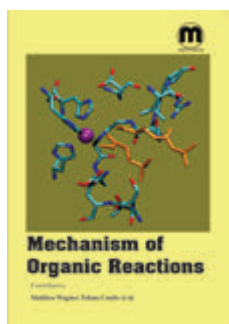


Chemical Bonding

Contributors: Alexander F. Sax et al.

Bonding is an attraction between atoms that allows the formation of chemical substances that contain two or more atoms. The bond is caused by the electrostatic force of attraction between opposite charges, either between electrons and nuclei, or as the result of a dipole attraction. This book includes the study about chemical bonding in terms of electronic structure and dynamics of bond rearrangements.

Print ISBN: 9781682501627 | \$170 | Pub Year: 2016 | Hardcover

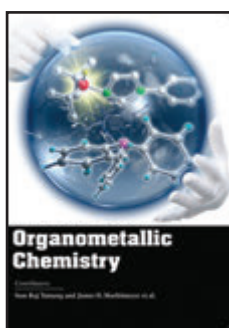


Mechanism of Organic Reactions

Contributors: Mathieu Wagner, Yohan Contie, et al.

Organic reactions synthesizes the organic chemistry literature around particular chemical transformations and is the comprehensive reference that contains authoritative, critical reviews of many important synthetic reactions. This book contains a comprehensive compilation all of the published examples of the reaction organized in tables according to the structure of the starting material.

Print ISBN: 9781682501658 | \$160 | Pub Year: 2016 | Hardcover

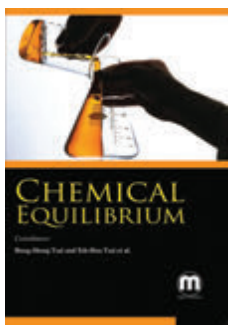


Organometallic Chemistry

Contributors: Sem Raj Tamang and James D. Hoefelmeyer et al.

Study of chemical compounds containing at least one bond between a carbon atom of an organic compound and a metal, also its combine's aspects of inorganic chemistry and organic chemistry. Organometallic compounds are widely used in homogeneous catalysis. This book deals with compounds in which an organic group is attached through carbon to an atom which is less electronegative than carbon.

Print ISBN: 9781682501696 | \$170 | Pub Year: 2016 | Hardcover

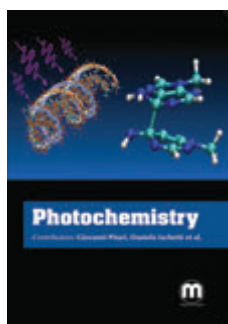


Chemical Equilibrium

Contributors: Hung-Sheng Tsai and Teh-Hua Tsai et al.

Chemical equilibrium is the state in which both reactants and products are present in concentrations which have no further tendency to change with time. This book defines the direction in which a chemical reaction will proceed, as well as the quantities of reactants and products that will remain after the reaction comes to an end and also discuss how it can be manipulated is essential for anyone involved in chemistry and its applications.

Print ISBN: 9781682501672 | \$170 | Pub Year: 2016 | Hardcover

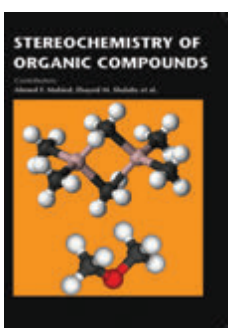


Photochemistry

Contributors: Giovanni Pitari, Daniela Iachetti et al.

The branch of chemistry concerned with the chemical effects of light and used to describe a chemical reaction caused by absorption of ultraviolet, visible light or infrared radiation. Also concerned with reaction which are initiated by electronically excited molecules. This book compiles unimolecular and bimolecular photochemical data for a wide range of commonly used organic molecules, and devoted to comprehensive and critical reviews of various organic compounds and photo-click chemistry, another on continuous flow photochemical reactions.

Print ISBN: 9781682501702 | \$170 | Pub Year: 2016 | Hardcover



Stereochemistry of Organic Compounds

Contributors: Ahmed F. Mabied, Elsayed M. Shalaby et al.

Stereochemistry is the chemistry which deals with the different arrangement of atoms or groups in a molecule in space. Stereochemistry plays a very vital role in our day to day life. It has been observed that many living systems, plants, and many pharmaceuticals possess or respond to only a particular type of arrangement in a molecule and are found to be stereospecific in nature. During recent years, stereochemistry has undergone a phenomenal growth both in theory and practice, with a simultaneous increase of interest among the organic chemists, biological chemists, medicinal chemists, and pharmacologists. The present book provides coherent and comprehensive account of the subject starting from the fundamentals and leading up to the latest developments as far as practicable.

Print ISBN: 9781682501665 | \$170 | Pub Year: 2016 | Hardcover

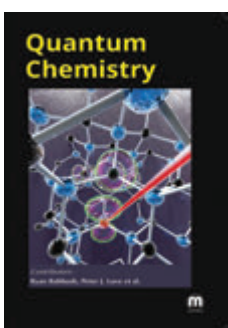


Bioorganic Chemistry

Contributors: G. Athanasellis, O. Igglessi-Markopoulou et al.

A rapidly growing scientific discipline that combines organic chemistry and biochemistry. It applies the principles and techniques of organic chemistry to solve problems of biological relevance or takes inspiration from biology to develop new chemical processes. This book recapitulates the state of the art in sectors of bioorganic chemistry that, rather than mimic the natural example, aim to utilize the underlying principles for useful applications.

Print ISBN: 9781682501689 | \$170 | Pub Year: 2016 | Hardcover

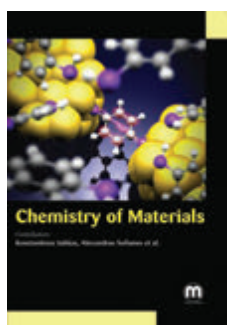


Quantum Chemistry

Contributors: Ryan Babbush, Peter J. Love et al.

Quantum Chemistry is the branch of chemistry whose primary focus is the application of quantum mechanics in physical models and experiments of chemical systems. It is also called molecular quantum mechanics and studies the ground state of individual atoms and molecules, the excited states, and the transition states that occur during chemical reactions. This book presents the widest range of quantum chemical problems and covers the unique structure that allows material to be tailored for the specific needs.

Print ISBN: 9781682501719 | \$170 | Pub Year: 2016 | Hardcover

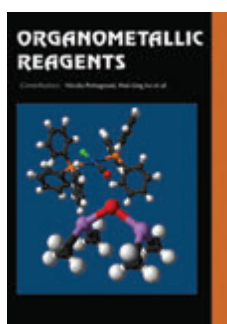


Chemistry of Materials

Contributors: Konstantinos Sakkas, Alexandros Sofianos et al.

A material is defined as a substance, most often a solid that is intended to be used for certain applications. There are a myriad of materials. Materials can generally be divided into two classes: crystalline and non-crystalline. This book focuses on chemical bonding, crystal structure, mechanical properties, phase transformations, and materials processing of materials.

Print ISBN: 9781682501832 | \$170 | Pub Year: 2016 | Hardcover



Organometallic Reagents

Contributors: Nicola Petragnani, Wai-Ling Lo et al.

Organometallic reagent is the study of chemical compounds containing at least one bond between a carbon atom of an organic compound and a metal. It is practically uses in stoichiometric and catalytic processes, especially processes involving carbon monoxide and alkene-derived polymers. This book brings together experts across the whole range of fields associated with organometallic chemistry to provide a reagents of up-to-date information.

Print ISBN: 9781682501801 | \$170 | Pub Year: 2016 | Hardcover

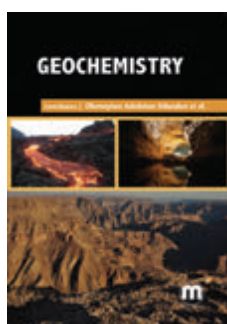


Surface Chemistry

Contributors: Yih Hong Lee, Wenxiong Shi et al.

Surface chemistry studies the chemical reactions at interfaces and closely related to surface engineering, which aims at modifying the chemical composition of a surface by incorporation of selected elements or functional groups that produce various desired effects or improvements in the properties of the surface or interface. This book emphasizes the modern concepts of surface chemistry uncovered by breakthroughs in molecular-level studies of surfaces over the past three decades while serving as a reference source for data and concepts related to properties of surfaces and interfaces.

Print ISBN: 9781682501726 | \$170 | Pub Year: 2016 | Hardcover

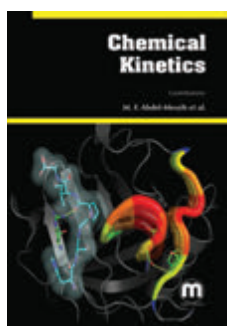


Geochemistry

Contributors: Olumuyiwa Adedotun Odundun et al.

Geochemistry is the study of the chemical make up of the Earth, as well as the other planets and that uses the tools and principles of chemistry to explain the mechanisms behind major geological systems such as the Earth's crust and its oceans. This book focuses on the chemical reactions and processes which show them how various soils and rocks are created and also state, how the chemical components that move through the earth interact with the atmosphere and the hydrosphere.

Print ISBN: 9781682502105 | \$170 | Pub Year: 2016 | Hardcover

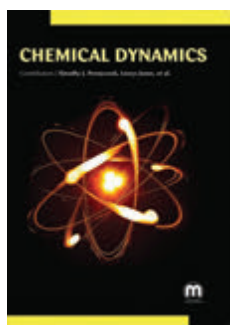


Chemical Kinetics

Contributors: M. F. Abdel-Messih et al.

Chemical kinetics is the study of rates of chemical processes and includes investigations of how different experimental conditions can influence the speed of a chemical reaction and yield information about the reaction's mechanism and transition states, as well as the construction of mathematical models that can describe the characteristics of a chemical reaction. This book examines the physical theory, phenomenology and empiricism to provide a guide to the experimental practice and interpretation of reaction kinetics in solution.

Print ISBN: 9781682501771 | \$170 | Pub Year: 2016 | Hardcover

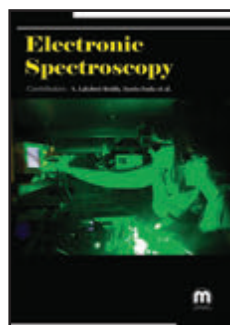


Chemical Dynamics

Contributors: Timothy J. Pennycook, Lewys Jones et al.

Chemical dynamics is a field in which Scientists study the rates and mechanisms of chemical reactions and also involves the study of how energy is transferred among molecules as they undergo collisions in gas-phase or condensed-phase environments. This book illustrates the importance of detailed chemical dynamics and the role it plays in the phenomenology of a number of chemical mechanisms and chemical coupling.

Print ISBN: 9781682501733 | \$170 | Pub Year: 2016 | Hardcover

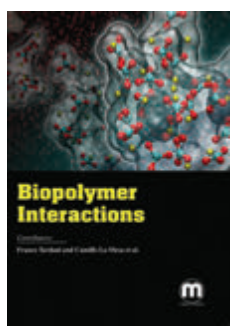


Electronic Spectroscopy

Contributors: S. Lakshmi Reddy, Tamio Endo et al.

Electronic spectroscopy relies on the quantized nature of energy states and the electron is excited first from an initial low energy state to a higher state by absorbing photon energy from the spectrophotometer. This book provides extraordinarily detailed information on the properties of molecules and are in widespread use in the physical and chemical sciences and focuses on the important areas such as chemical dynamics, kinetics, and atmospheric chemistry.

Print ISBN: 9781682501740 | \$170 | Pub Year: 2016 | Hardcover

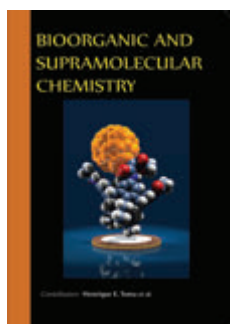


Biopolymer Interactions

Contributors: Franco Tardani and Camillo La Mesa et al.

Biopolymers are polymers produced by living organisms; in other words, they are polymeric biomolecules. It contains monomeric units that are covalently bonded to form larger structures and there are a number of biophysical techniques for determining sequence information. This book presents an overview of the interactions between native starch and other biopolymers used in the chemical industry.

Print ISBN: 9781682501788 | \$170 | Pub Year: 2016 | Hardcover

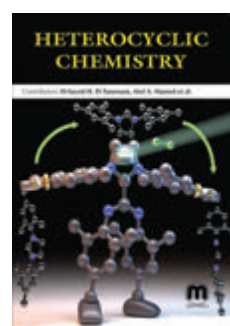


Bioorganic and Supramolecular Chemistry

Contributors: Henrique E. Toma et al.

Bioorganic chemistry is a rapidly growing scientific discipline that combines organic chemistry and biochemistry. Supramolecular chemistry refers to the domain of chemistry beyond that of molecules and focuses on the chemical systems made up of a discrete number of assembled molecular subunits or components. This book presents the fundamental concepts of bioorganic, and supramolecular chemistry.

Print ISBN: 9781682501795 | \$170 | Pub Year: 2016 | Hardcover

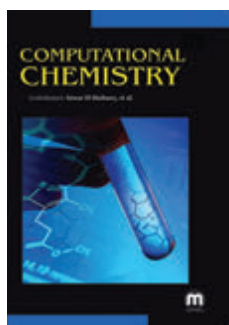


Heterocyclic Chemistry

Contributors: El-Sayed H. El-Tammany, Atef A. Hamed et al.

Heterocyclic chemistry is the branch of chemistry dealing with the synthesis, properties and applications of these hetero-cycles and identifying the heterocyclic compound or ring structure, which is a cyclic compound that has atoms of at least two different elements as members of its ring. This book examines the critical reviews on present and future trends in the research of heterocyclic compounds and dealing with all areas within heterocyclic chemistry, both experimental and theoretical, of interest to the general heterocyclic chemistry community.

Print ISBN: 9781682501818 | \$170 | Pub Year: 2016 | Hardcover

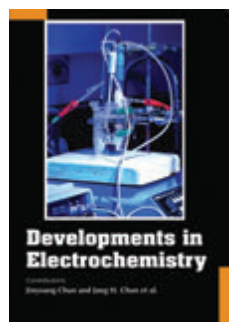


Computational Chemistry

Contributors: Anwar El-Shahawy et al.

Computational chemistry is a branch of chemistry that uses computer simulation to assist in solving chemical problems and calculate the structures and properties of molecules and solids. It becomes a useful way to investigate materials that are too difficult to find or too expensive to purchase, also helps chemists make predictions before running the actual experiments so that they can be better prepared for making observations. This book provides nonmathematical explanations of advanced topics in computational chemistry and focuses on when and how to apply different computational techniques.

Print ISBN: 9781682501849 | \$170 | Pub Year: 2016 | Hardcover

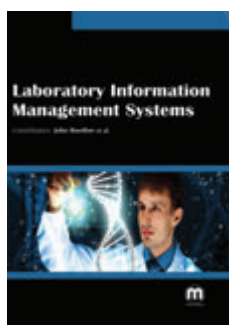


Developments In Electrochemistry

Contributors: Jinyoung Chun, Jang H. Chun et al.

Electrochemistry is a branch within the field of chemistry which involves the intersection between chemical reactions and electrical currents. It deals with the interaction between electrical energy and chemical change and used in a wide range of industrial processes, and in technology utilized in numerous settings. This book serves as a source of electrochemical information, providing details of experimental considerations, representative calculations, and illustrations of the possibilities available in electrochemical experimentation.

Print ISBN: 9781682502259 | \$170 | Pub Year: 2016 | Hardcover

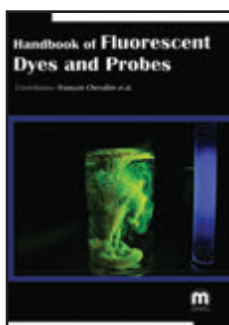


Laboratory Information Management Systems

Contributors: John Boother et al.

Laboratory information management system is a software-based laboratory and information management system with features that support a modern laboratory's operations. Its functionality helps in the reception and log in of a sample and its associated customer data. This book responds to the issue of administering appropriate regulations in a medical laboratory environment in the era of telemedicine, electronic health records, and other e-health services.

Print ISBN: 9781682502266 | \$170 | Pub Year: 2016 | Hardcover

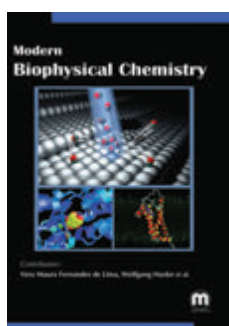


Handbook of Fluorescent Dyes and Probes

Contributors: François Chevalier et al.

Fluorescent dye is a yellow dye that is visible even when highly diluted; used as an absorption indicator when silver nitrate solution is added to sodium chloride in order to precipitate silver chloride. Whereas fluorescent probes are molecules that absorb light of a specific wavelength and emit light of a different, typically longer, wavelength, and are used to study biological samples. This book covering all the available dyes and probes known to date in the literature for uses in various fields. Also provides access to synthetic procedures (lab scale and industrial scale) of dyes and probes in a single source.

Print ISBN: 9781682502426 | \$190 | Pub Year: 2016 | Hardcover



Modern Biophysical Chemistry

Contributors: Vera Maura Fernandes de Lima, Wolfgang Hanke et al.

Modern biophysical chemistry is the study of the physical properties of biological macromolecules at either a chemical sequence level or a more global structural level. It also studies the properties of biological molecules along with the principles and methods of physics and physical chemistry. This book surveys fundamental and spectroscopic techniques as well as biomolecule properties that represent the modern standard and also covers the latest bio-analytical techniques such as the mentioned super-resolution and next generation sequencing methods, confocal fluorescence microscopy, light sheet microscopy.

Print ISBN: 9781682502433 | \$170 | Pub Year: 2016 | Hardcover

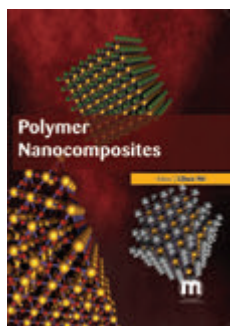


Synthesis and Applications of Copolymers

Contributors: Cynthia D'Avila Carvalho Erbetta, Ricardo José Alves et al.

When two or more different monomers unite together to polymerize, their result is called a copolymer and its process is called copolymerization. A copolymer is made when two different types of molecules are joined in the same polymer chain. This book explores the reactivity of monomers and reaction conditions that ensure that the newly formed polymeric materials exhibit desired properties.

Print ISBN: 9781682502341 | \$170 | Pub Year: 2016 | Hardcover

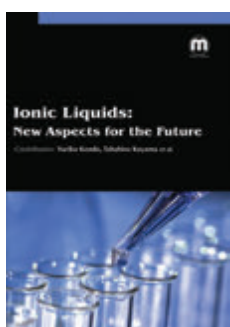


Polymer Nanocomposites

Editor: Lihua Hé

Polymer nanocomposites (PNC) consist of a polymer or copolymer having nanoparticles or nanofillers dispersed in the polymer matrix. These may be of different shape, but at least one dimension must be in the range of 1-50 nm. These PNC's belong to the category of multi-phase systems that consume nearly 95% of plastics production. These systems require controlled mixing/compounding, stabilization of the achieved dispersion, orientation of the dispersed phase, and the compounding strategies for all MPS, including PNC, are similar. In the large field of nanotechnology, polymer matrix based nanocomposites have become a prominent area of current research and development. This book concentrates on the recently studied polymer nanocomposites and highlights their synthesis, properties and applications.

Print ISBN: 9781682502716 | \$170 | Pub Year: 2016 | Hardcover

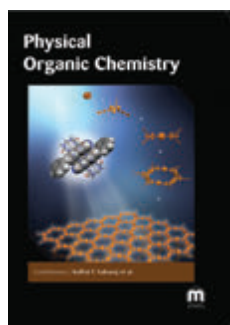


Ionic Liquids: New Aspects for the Future

Contributors: Yuriko Kondo, Tahahiro Koyama et al.

An ionic liquid is a salt in the liquid state. In some contexts, the term has been restricted to salts whose melting point is below some arbitrary temperature, such as 100°C. While ordinary liquids such as water and gasoline are predominantly made of electrically neutral molecules, ionic liquids are largely made of ions and short-lived ion pairs. These substances are variously called liquid electrolytes, ionic melts, ionic fluids, fused salts, liquid salts, or ionic glasses. Ionic liquids have many applications, such as powerful solvents and electrically conducting fluids (electrolytes). Salts that are liquid at near-ambient temperature are important for electric battery applications, and have been used as sealants due to their very low vapour pressure. This book tends to review recent progresses in ionic liquid research on fundamental properties, solvents and catalysts in organic reactions, biological applications, providing energies and fuels, biomass conversions, functional materials, and other applications.

Print ISBN: 9781682502754 | \$170 | Pub Year: 2016 | Hardcover

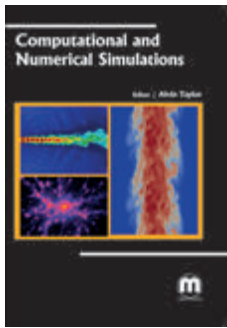


Physical Organic Chemistry

Contributors: Kalliat T. Valsaraj et al.

Physical organic chemistry refers to a discipline of organic chemistry that focuses on the relationship between chemical structures and reactivity, in particular, applying experimental tools of physical chemistry to the study of organic molecules. This book makes explicit the many connections between physical organic chemistry and critical fields such as organometallic chemistry, materials chemistry, bioorganic chemistry, and biochemistry.

Print ISBN: 9781682501825 | \$170 | Pub Year: 2016 | Hardcover



Computational and Numerical Simulations

Editor: Alvin Taylor

This book covers the recent topics devoted to numerical simulations of physical and engineering systems. It gives both new theories and their applications, showing bridge between theoretical studies, and prospect to apply them by engineers of diverse branches of science. Numerical simulations play a significant role in both theoretical and application oriented research.

Print ISBN: 9781682500125 | \$ 170 | Pub Year: 2016 | Hardcover

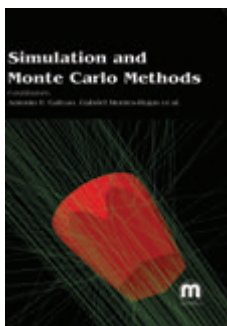


Image Fusion: New Advances

Editor: Andre Thomas

Multisensor Image Fusion, in computer vision, is the process of merging appropriate information from two or further images into a single image. The subsequent image will be more instructive than any of the input images. Several situations in image processing require high spatial and high spectral resolution in a single image. Many methods exist to perform image fusion. The very basic one is the high pass filtering technique. Later techniques are based on Discrete Wavelet Transform, uniform rational filter bank, and Laplacian pyramid. Image fusion is a new study field which combined with many different disciplines, such as sensors, signal processing, image processing, computer and artificial intelligence. In the past two decades, a large number of research literatures appear. This book is intended to give new advancements in the field of image fusion.

Print ISBN: 9781682500132 | \$ 180 | Pub Year: 2016 | Hardcover



Simulation and Monte Carlo Methods

Contributors: Antonio F. Galvao, Gabriel Montes-Rojas et al.

Monte Carlo simulation is a computerized mathematical technique that allows people to account for risk in quantitative analysis and decision making. The technique is used by professionals in such widely disparate fields as finance, project management, energy, manufacturing, engineering, research and development, insurance, oil & gas, transportation, and the environment. Monte Carlo simulation furnishes the decision-maker with a range of possible outcomes and the probabilities they will occur for any choice of action. It shows the extreme possibilities—the outcomes of going for broke and for the most conservative decision—along with all possible consequences for middle-of-the-road decisions. The objective of this book is to introduce recent advances and applications of Monte Carlo Simulations in numerous fields.

Print ISBN: 9781682502884 | \$ 170 | Pub Year: 2016 | Hardcover

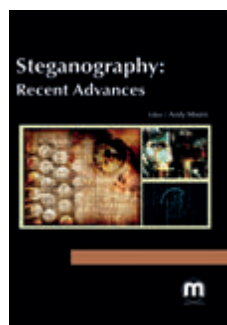


Advances In Computer Science and Engineering

Contributors: Moses Okechukwu Onyesolu, Felista Udoka Eze et al.

Computer science refers to the scientific and practical approach concerned to computation and its applications. In other words, it is the logical study of the feasibility, structure, expression, and mechanization of the methodical procedures that gives the acquisition, representation, processing, storage, communication of, and access to information. This book covers topics in the scientific fields of applied computing techniques, innovations in engineering, and applications and advances in applied modeling.

Print ISBN: 9781682502587 | \$ 170 | Pub Year: 2016 | Hardcover

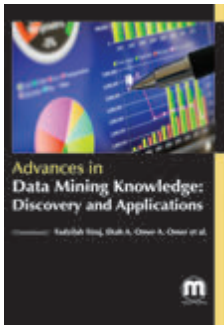


Steganography: Recent Advances

Editor: Andy Moore

Steganography is the art and science of hiding information by embedding messages within other, seemingly harmless messages. It works by replacing bits of useless or unused data in regular computer files (such as graphics, sound, text, HTML, or even floppy disks) with bits of different, invisible information. This hidden information can be plain text, cipher text, or even images. Steganography sometimes is used when encryption is not permitted. Or, more commonly, steganography is used to supplement encryption. An encrypted file may still hide information using steganography, so even if the encrypted file is deciphered, the hidden message is not seen. This book focuses on a relatively new field of study in Steganography and it takes a look at this technology by introducing the readers various concepts of Steganography and Steganalysis.

Print ISBN: 9781682500156 | \$ 180 | Pub Year: 2016 | Hardcover

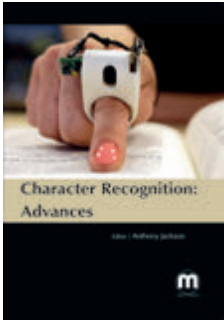


Advances in Data Mining Knowledge: Discovery and Applications

Contributors: Fadzilah Siraj, Ehab A. Omer A. Omer et al.

Data mining refers to the computational process of discovering patterns in big data sets. Data mining is an interdisciplinary subfield of computer science. It contains methods of the intersection of artificial intelligence, machine learning, statistics, and database systems. The objective of Advances in Data Mining Knowledge Discovery and Applications is to assist data miners, researchers, scholars, and PhD students who requires to apply data mining techniques. The primary objective of this book is highlighting frontier fields and applications of the knowledge discovery and data mining.

Print ISBN: 9781682500194 | \$ 180 | Pub Year: 2016 | Hardcover

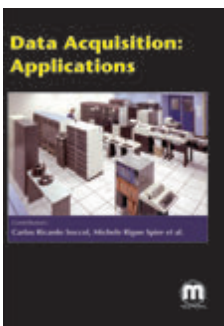


Character Recognition: Advances

Editor: Anthony Jackson

The mechanical or electronic conversion of images of typed, handwritten or printed text into machine-encoded text is referred to optical character recognition (OCR). It is widely used as a form of data entry from printed paper data records, whether passport documents, invoices, bank statements, or any other document. OCR is a field of research in pattern recognition, artificial intelligence and computer vision. Early optical character recognition may be traced to technologies involving telegraphy and creating reading devices for the blind. This book, a valuable tool for professionals working in the character recognition field and for all interested in the subject, presents advances in character recognition and covers inclusive range of topics on numerous aspects of character recognition.

Print ISBN: 9781682500170 | \$ 180 | Pub Year: 2016 | Hardcover



Data Acquisition: Applications

Contributors: Carlos Ricardo Soccol, Michele Rigon Spier et al.

Data acquisition refers to the process of sampling signals that measure real world physical conditions and converting the resulting samples into digital numeric values that can be manipulated by a computer. Data acquisition systems usually change analog waveforms into digital values for processing. The components of data acquisition systems consist of sensors, to convert physical parameters to electrical signals; signal conditioning circuitry, to convert sensor signals into a form that can be converted to digital values; analog-to-digital converters, to convert conditioned sensor signals to digital values. Data acquisition applications are typically controlled by software programs developed using numerous general purpose programming languages. Data acquisition systems have various applications. This book emphasizes on the application of data acquisition in various fields.

Print ISBN: 9781682500200 | \$ 160 | Pub Year: 2016 | Hardcover

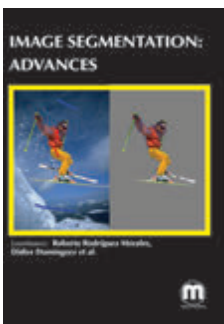
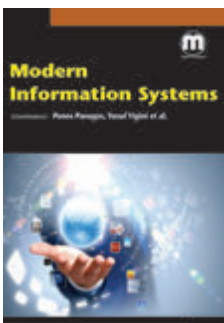


Image Segmentation: Advances

Contributors: Roberto Rodríguez Morales, Didier Domínguez et al.

The term image segmentation refers to the partition of an image into a set of regions that cover it. The goal in many tasks is for the regions to represent meaningful areas of the image, such as the crops, urban areas, and forests of a satellite image. To be meaningful and useful for image analysis and interpretation, the regions should strongly relate to depicted objects or features of interest. Meaningful segmentation is the first step from low-level image processing transforming a greyscale or color image into one or more other images to high-level image description in terms of features, objects, and scenes. The field of digital image segmentation is continually evolving. This book highlights the significant progress that has been made in the field of image segmentation in just the past few years.

Print ISBN: 9781682500187 | \$ 180 | Pub Year: 2016 | Hardcover

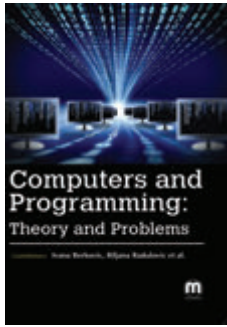


Modern Information Systems

Contributors: Panos Panagos, Yusuf Yigini et al.

An information system refers to the software that helps organize and analyze data. So, the aim of an information system is to convert raw data into convenient information that can be used for decision making in an organization. This book addresses relationships between information systems and changes in the modern organizations, both within and across organizations. The emerging organizational form includes complementary changes in multiple extents. The revolution in information systems advantages special focus as both cause and effect of the organizational transformation.

Print ISBN: 9781682500217 | \$ 170 | Pub Year: 2016 | Hardcover



Computers and Programming: Theory and Problems

Contributors: Ivana Berkovic, Biljana Radulovic et al.

Computer programming is the act of writing computer programs, which are a sequence of instructions written using a computer programming language to perform a specified task by the computer. Programming involves activities such as analysis, developing understanding, generating algorithms, verification of requirements of algorithms including their correctness and resources consumption, and implementation of algorithms in a target programming language. Related tasks include testing, debugging, and maintaining the source code, implementation of the build system, and management of derived artifacts such as machine code of computer programs. This book covers theory and problems related to computer programming.

Print ISBN: 9781682500446 | \$ 170 | Pub Year: 2016 | Hardcover

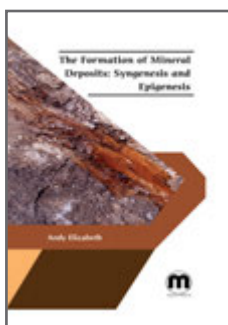


Applied Cryptography and Network Security

Contributors: W. Chen, H.-W. Li et al.

The growth of cryptographic technology has raised a number of legal issues in the information age. Cryptography will continue to play important roles in developing of new security solutions which will be in great demand with the advent of high-speed next-generation communication systems and networks. This book discusses some of the critical security challenges faced by today's computing world and provides insights to possible mechanisms to defend against these attacks.

Print ISBN: 9781682500231 | \$ 170 | Pub Year: 2016 | Hardcover

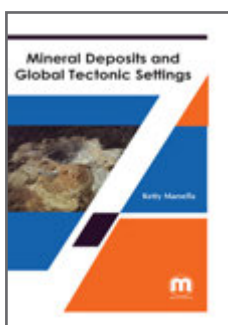


The Formation of Mineral Deposits: Syngensis and Epigenesis

Editor: Andy Elizabeth

Minerals are naturally formed crystals that are composed of one or more chemical elements. They are distinguished from other natural solid materials by their crystalline structure. This book is intended to cover on metallic and nonmetallic mineral resources and the conditions of their formation and distribution. It covers original scientific articles and reviews on a wide range of problems in theoretical and applied science valuable for students as well as practitioners dealing with geology.

Print ISBN: 978-1-68250-516-8 | \$150 | 2019 | Hardcover



Mineral Deposits and Global Tectonic Settings

Editor: Ketty Marsella

Scientists have only arrived at our current understanding of plate tectonics over the past 40 years. Tectonics has application to lunar and planetary studies, whether or not those bodies have active tectonic plate systems. Covering different aspects of tectonic researches, especially to modern geodynamic processes, syntheses of recent and earlier works, combined with new results and interpretations, are presented here for diverse tectonic settings and mineral deposits. This book focuses on a unique stage in the ocean closure process, when significant convergence already induced major deformations, yet the inter-plate basins and margins still record the geological history.

Print ISBN: 978-1-68250-517-5 | \$150 | 2019 | Hardcover



Modern Coal Mining: Methods and Applications

Editor: George Michael

This book serves as an essential guide for students and practitioners dealing with mining engineering and related programs, and a must-have reference for mining, civil and geotechnical engineers. The book covers an integrated approach towards the applications of coal petrology and discusses the role of this science in the field of coal and coal-related topics. It focuses on key topics of coal scientific research and mining development, serving as a valuable resource for students and scientists to present research findings and discuss challenging issues.

Print ISBN: 978-1-68250-518-2 | \$150 | 2019 | Hardcover

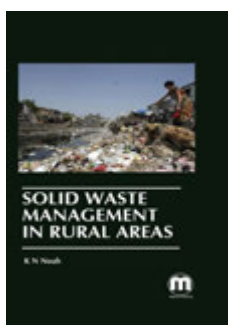


Waste Reduction for Pollution Prevention

Editor: Peter Stanneck

Today, every person living on planet Earth is worried about environmental pollution because the consequences faced every day, through the air we breathe, the food and water we consume, through pollution and radiation we are exposed to. This book will discuss the problem of environmental pollution and waste management. Everything that surrounds us is directly or indirectly connected to the environment. Not only the man, but also other living existences as well as the nature have effects on environmental pollution.

Print ISBN: 978-1-68250-519-9 | \$150 | 2019 | Hardcover

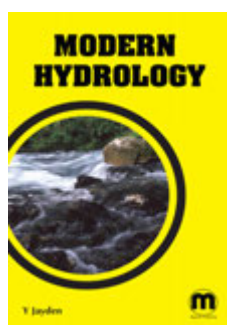


Solid Waste Management in Rural Areas

Editor: K N Noah

Solid waste management in rural areas is a key issue in developing and transitioning countries due to the lack of proper waste management facilities and services. This book is intended to equip technical waste management professionals with a basic understanding of the concept of institutions required to inform a holistic approach to the task of institutional development in the sanitation sector, and to make them appreciate how institutional issues affect sustainability in all of its dimensions. A comprehensive reference tool for academics, various professionals, the members of civil society, and national and local authorities.

Print ISBN: 978-1-68250-520-5 | \$155 | 2019 | Hardcover

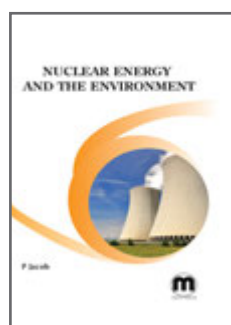


Modern Hydrology

Editor: Y Jayden

The field of hydrology has attracted a lot of attention during the past few decades. This book demonstrates the extensive range of issues that are dealt with in the field of hydrogeology. Hydrogeology and deposition processes, hydrogeochemistry, soil hydraulic properties as an aspect affecting groundwater recharge processes, and geophysical exploration for groundwater are all discussed in this book, giving the reader a global perspective on what hydrogeologists and co-scientists are currently working on to better manage groundwater resources.

Print ISBN: 978-1-68250-521-2 | \$155 | 2019 | Hardcover

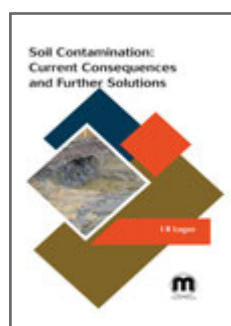


Nuclear Energy and the Environment

Editor: P Jacob

Nuclear energy has been developed and used commercially for about two decades to meet a fraction of the electrical energy needs. The book presents insights at both the positive and negative aspects of nuclear energy, giving weight to both sides of the argument to present a detailed look at this resource. An appealing guide to everyone with interests in system simulations and nuclear power operational aspects as its potential readership groups - students, researchers and practitioners as well as for those who wish to improve their understanding of this complex, fascinating and increasingly important subject.

Print ISBN: 978-1-68250-522-9 | \$155 | 2019 | Hardcover

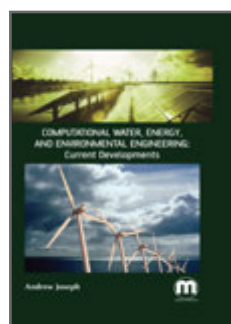


Soil Contamination: Current Consequences and Further Solutions

Editor: I R Logan

The purpose of this book is to examine how the technological, economic, environmental, social, legal, and political framework of contaminated sites and the current remediation strategies hinder progress toward sustainability. The book contains several innovative approaches for soil remediation and risk assessment, including advances in phytoremediation and implementation of metabolomics in soil sciences. This book will meet the expectations and needs of all interested in varied fields with expertise in soil science, health, toxicology, and other disciplines who contribute and share their findings to take this area forward for future investigations.

Print ISBN: 978-1-68250-523-6 | \$155 | 2019 | Hardcover



Computational Water, Energy, and Environmental Engineering: Current Developments

Editor: Andrew Joseph

Energy is considered to be a key player in the generation of wealth and also a significant component in economic development. This makes energy resources extremely significant for every country in the world. This book attempts to cover state of the art information on computational water, energy and environmental engineering under one umbrella. It explains the underlying physical and technological principles, and examines the environmental impact of renewable sources and their future prospects.

Print ISBN: 978-1-68250-524-3 | \$150 | 2019 | Hardcover

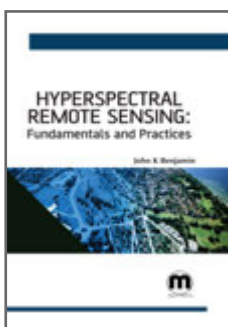


Organic Pollutants: Monitoring, Risk and Treatment

Editor: Tony Disilva

This book deals with several aspects of organic pollutants, especially in the light of organic pollutants monitoring, risk assessment as well as the practical application of different techniques for removing it from the environment. It is intended to provide a comprehensive overview of what constitutes a POP, highlight the harmful effects they may have on biota, make some comments on their environmental sources and analysis, their environmental trends and processes, their movement through foodchains and highlight some important regional and global-scale environmental transport issues.

Print ISBN: 978-1-68250-525-0 | \$150 | 2019 | Hardcover

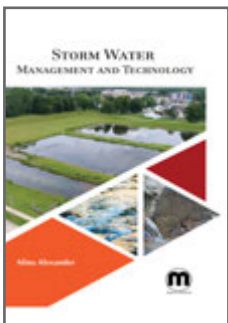


Hyperspectral Remote Sensing: Fundamentals and Practices

Editor: John K Benjamin

Hyperspectral imaging which combines imaging and spectroscopic technology is rapidly gaining ground as a non-destructive, real-time detection tool for different applications. Hyperspectral data provides substantially increased understanding of plant biophysical and biochemical properties relative to multispectral broadband data. This book is intended to integrate innovative information dealing with this technology from all aspects giving special emphasis to remote sensing of the Earth.

Print ISBN: 978-1-68250-526-7 | \$155 | 2019 | Hardcover



Storm Water Management and Technology

Editor: Alina Alexander

Storm water is conveyed quickly and efficiently via underground pipe networks to streams, rivers and coastal waters. The book addresses the issues surrounding the assessment, management, and control of stormwater, and more specifically urban runoff. This book serves as valuable guide to landscape architects, civil engineers, architects, wetlands scientists, and other environmental professionals who must comply with ever-changing government regulations.

Print ISBN: 978-1-68250-527-4 | \$155 | 2019 | Hardcover



LiDAR Remote Sensing and Applications

Editor: Alex Petrica

This book covers latest and futuristic developments in remote sensing novel theory and applications by numerous scholars, researchers and experts. Covering the fundamentals of LiDAR remote sensing, LiDAR data processing and analysis methods and applications of LiDAR in forestry and vegetation mapping, urban environments, and geosciences; to expand the knowledge about various remote sensing techniques and persuade researchers to deliver new research novelty for environment studies.

Print ISBN: 978-1-68250-528-1 | \$150 | 2019 | Hardcover

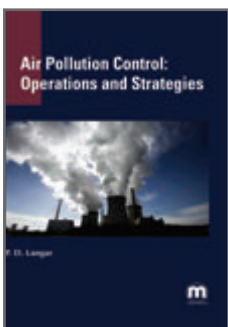


Environmental Exposure From Chemicals

Editor: I R Gavin

A wide range of chemical substances act as pollutants, ranging from simple inorganic ions to complex organic molecules. Industrialization and manufacturing have had enormous positive benefits for humankind, but the consequences of hazardous byproducts to human health and the environment are less well recognized. This book reviews the nature and importance of environmental exposure to chemicals in developing and developed countries, outlining past actions, and indicating requirements for future policy responses and interventions.

Print ISBN: 978-1-68250-529-8 | \$155 | 2019 | Hardcover



Air Pollution Control Operations and Strategies

Editor: P. D. Langar

Today, air pollution has emerged as a global public health problem. This book aims to understand the innovation activity in the technology domain and the different ways to observe patterns in relation to diffusion of innovation in different jurisdictions. It emphasizes on prominent air pollution control measures and innovative technology and R&D practices. It highlights various industry technologies for protection and exploitation of developed technologies. Suggestions for future adopted technologies for air pollution control is also suggested.

Print ISBN: 978-1-68250-444-4 | \$150 | 2018 | Hardcover

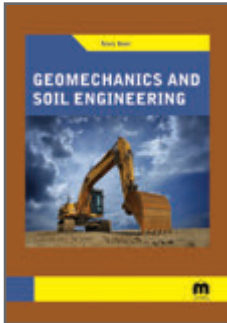


Modern Trends in Environmental Geomechanics

Editor: I. Baker

Geomechanics has proven to be the backbone of safe and cost effective mining practice. The last 20 years have seen wide application of fracture mechanics to geotechnical and geomechanical problems. This book covers a broad class of problems where deforming geomaterials are involved, usually coupled with fluid flow and transport of some substance. All these aspects are addressed in this book together with a theoretical framework. This work is intended for educators, industry and practicing engineers what it takes to be a good rock engineer and the real benefits of the subject for the good of society.

Print ISBN: 978-1-68250-445-1 | \$155 | 2018 | Hardcover

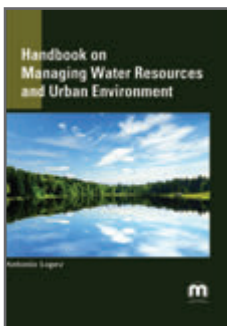


Geomechanics and Soil Engineering

Editor: Terry Kerr

Subsurface contamination of soils and groundwater is an area of growing concern in our society. This literature presents the comprehensive coverage in geotechnical and geo-environmental engineering range from studies of the basic physics and chemistry of soil behavior to applied field problems. The Book addresses the modeling of geomechanical effects induced by reservoir production and their influence on fluid flow in the reservoir.

Print ISBN: 978-1-68250-446-8 | \$155 | 2018 | Hardcover

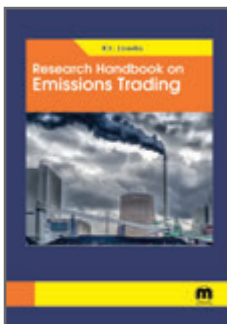


Handbook on Managing Water Resources and the Urban Environment

Editor: Antonio Lopez

Urban water management takes into consideration the total water cycle, facilitates the integration of water factors early in the land planning process, and encourages all levels of government and industry to adopt water management and urban planning practices that benefit the community, the economy and the environment. This book aims to develop a regional integrative framework for the assessment of water resource sustainability under current management practices, as well as to identify opportunities for sustainability improvement in coupled socio-hydrologic systems. This book will be of interest to academics and researchers.

Print ISBN: 978-1-68250-456-7 | \$150 | 2018 | Hardcover

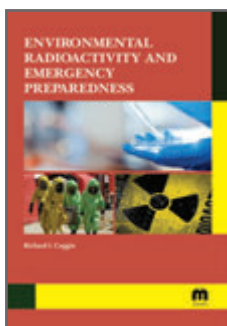


Research Handbook on Emissions Trading

Editor: PR.S. Leondes

Emissions trading allows established emission goals to be met in the most cost-effective way by letting the market determine the lowest-cost pollution abatement opportunities. This book examines the origins, implementation challenges and international dimensions of emissions trading. It follows an interdisciplinary approach drawing on law, economics and at times, political science, to present relevant research strands regarding emissions trading. This Handbook is intended to help decision makers, policy practitioners, and stakeholders achieve this goal.

Print ISBN: 978-1-68250-457-4 | \$150 | 2018 | Hardcover



Environmental Radioactivity and Emergency Preparedness

Editor: Richard L Coggin

Many forms of "radiation" are encountered in the natural environment and are produced by modern technology. Most of them have the potential for both beneficial and harmful effects. This work explores how to deal with the threats posed by different radiological sources, including those that are lost or hidden, and the issues posed by the use of such sources. It presents measurement methods and approaches to model and quantify the extent of threat, and also presents strategies for emergency preparedness, such as strategies for first-responders and radiological triage in case an accident should happen.

Print ISBN: 978-1-68250-458-1 | \$150 | 2018 | Hardcover

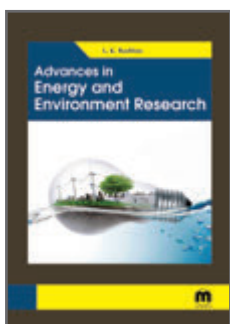


Climate Health Risks in Megacities

Editor: K. Javed Ahmed

The majority of the population of the planet now live in urban areas, which have divergent effects upon climate at measures from the local to the global. This book examines the nature of urban climate expertise and the needs of those that make decisions about urban areas. It makes recommendations to maintain and enhance urban observations and data; to improve understanding of local, regional and global climate linkages; to develop tools for practical planning; and to disseminate urban climate knowledge and its relevance to urban planning to both practicing meteorologists and urban decision makers.

Print ISBN: 978-1-68250-459-8 | \$155 | 2018 | Hardcover



Advances in Energy and Environment Research

Editor: L K Rushtan

Energy lies at the heart of modern society, and it is critical that we make informed choices regarding the methods by which we convert and manage energy. This book covers the social, economic and political dimensions of such issues at both national and international level. It is aimed at natural scientists, technologists and the international social science and policy communities. It contains original contributions that deal with direct and indirect environmental impacts of energy acquisition, transport, production and use.

Print ISBN: 978-1-68250-460-4 | \$150 | 2018 | Hardcover

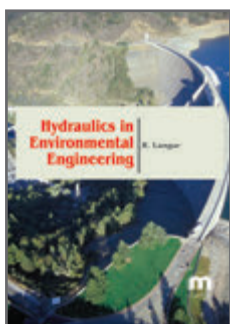


Plastic Marine Debris

Editor: Peter K. John

The debris poses a growing and direct threat to ocean life, marine habitats, human health, and navigational safety, with potentially serious economic and social ramifications. This literature focuses on plastic marine fragments sources and distribution; environmental impacts on coastal and ocean biodiversity; and effective solutions to tackle the plastic marine debris. This creation will be of valuable for students as well as researchers involved in the areas if environmental science.

Print ISBN: 978-1-68250-461-1 | \$150 | 2018 | Hardcover

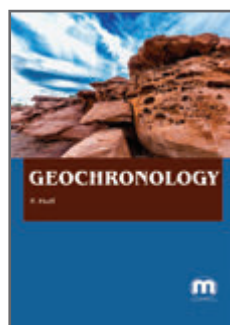


Hydraulics in Environmental Engineering

Editor: R. Langar

Hydraulics is concerned with the practical applications of fluids, primarily liquids, in motion. It is related to fluid mechanics, which in large part provides its theoretical foundation. Hydraulics deals with such matters as the flow of liquids in pipes, rivers, and channels and their confinement by dams and tanks. This book combines thorough coverage of the basic principles of environmental engineering hydraulics with wide-ranging treatment of practical, real-world applications. It is an essential resource for students and practitioners of civil, environmental, and public health engineering and associated disciplines.

Print ISBN: 978-1-68250-323-2 | \$155 | 2017 | Hardcover



Geochronology

Editor: P. Huff

Geochronology is the science of determining the age of rocks, fossils, and sediments using signatures inherent in the rocks themselves. Absolute geochronology can be accomplished through radioactive isotopes, whereas relative geochronology is provided by tools such as palaeomagnetism and stable isotope ratios. This book covers the standard principles and methods and incorporates many of new developments from the last decades. Therefore, the book should be of basic interest both for scientists in their practical in field and laboratory, as well as for general educational purpose.

Print ISBN: 978-1-68250-322-5 | \$155 | 2017 | Hardcover



Handbook of Urban Planning & Design

Editor: Dale Cooper

Urban design and planning is created upon the social, environmental, political, aesthetic and economic importance of design in the public realm, serving the public interest. It focuses on the intersections between architecture, landscape architecture, planning, and geography. The design of urban places explores two strongly related fields of environmental practice: urban design as the shaping of urban space and urban planning as the strategic and regulatory mediation of urban change. This book highlights some of these problems and discusses possible solutions in terms of urban, planning and management.

Print ISBN: 9781682500637 | \$ 180 | Pub Year: 2016 | Hardcover

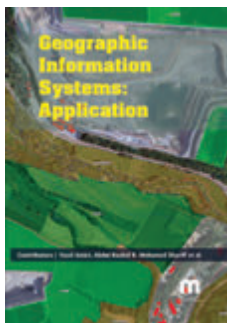


Handbook of Flood Risk Science & Management

Editor: Dan Reed

Floods have been recurrent phenomenon in many parts of world, causing loss of lives and public property and bringing untold misery to the people, especially those in the rural areas. There is also a larger economic impact, as they derail economic activities, thus affecting growth. Flood control and management refers to all methods used to reduce or prevent the detrimental effects of flood waters. Some of the common techniques used for flood control are installation of rock berms, rock rip-raps, sandbags, maintaining normal slopes with vegetation or application of soil cements on steeper slopes and construction or expansion of drainage channels. Other methods include levees, dikes, dams, retention or detention basins. This book provides an extensive and comprehensive topics in flood risk and management.

Print ISBN: 9781682500644 | \$ 180 | Pub Year: 2016 | Hardcover

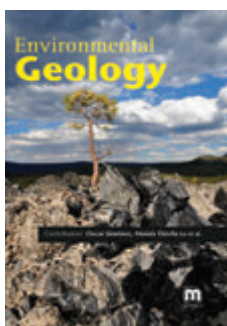


GEOGRAPHIC INFORMATION SYSTEMS: APPLICATION

Contributors: Fazel Amiri, Abdul Rashid B. Mohamed Shariff et al.

Geographic information systems (GIS) are computer software and hardware systems that enable users to capture, store, analyze and manage spatially referenced data. These are also known as Geospatial information systems. GISs have transformed the way geographic data, relationships, and patterns in the world are able to be interactively queried, processed, analyzed, mapped, modelled, visualized, and displayed for an increasingly large range of users, for a multitude of purposes. The importance of geographic information systems (GIS) can hardly be overemphasized in today's academic and professional arena. More professionals and academics have been using GIS than ever – urban & regional planners, civil engineers, geographers, spatial economists, sociologists, environmental scientists, criminal justice professionals, political scientists, and alike. The book is a blend of the theories of GIS and their practical implementations in different conditions.

Print ISBN: 9781682502617 | \$ 170 | Pub Year: 2016 | Hardcover

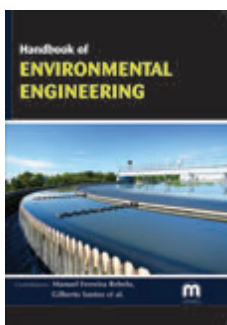


ENVIRONMENTAL GEOLOGY

Contributors: Oscar Jiménez, Moisés Dávila et al.

Environmental geology are managing geological and hydrogeological resources such as fossil fuels, minerals, water (surface and ground water), and land use also defining and mitigating exposure of natural hazards on humans. This book discusses everything from fundamental geologic principles to the specifics of environmental law and geologic hazards, from a truly environmental perspective.

Print ISBN: 9781682502136 | \$ 170 | Pub Year: 2016 | Hardcover

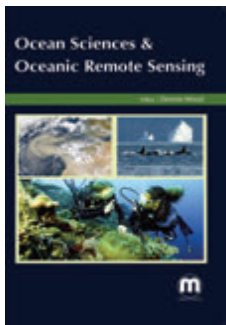


HANDBOOK OF ENVIRONMENTAL ENGINEERING

Contributors: Manuel Ferreira Rebelo, Gilberto Santos et al.

Environmental engineering is the branch of engineering that is concerned with protecting people from the effects of adverse environmental effects, such as pollution, as well as improving environmental quality. Furthermore, it is concerned with finding plausible solutions in the field of public health, such as waterborne diseases, implementing laws which promote adequate sanitation in urban, rural, and recreational areas. It involves waste water management and air pollution control, recycling, waste disposal, radiation protection, industrial hygiene, environmental sustainability, and public health issues as well as a knowledge of environmental engineering law. This book promotes environmental protection and innovative solutions to ensure healthy, safe and efficient industrial operations.

Print ISBN: 9781682500668 | \$ 190 | Pub Year: 2016 | Hardcover

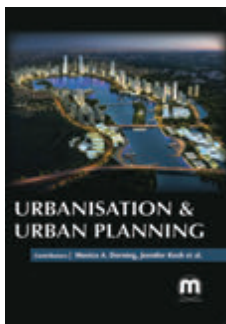


Ocean Sciences & Oceanic Remote Sensing

Editor: Dennis Wood

Ocean science studies about the ocean and covers a wide range of topics, including marine organisms and ecosystem dynamics; ocean currents, waves, and geophysical fluid dynamics; plate tectonics and the geology of the sea floor; and fluxes of various chemical substances and physical properties within the ocean and across its boundaries. These diverse topics reflect multiple disciplines that oceanographers blend to further knowledge of the world ocean and understanding of processes within: astronomy, biology, chemistry, climatology, geography, geology, hydrology, meteorology, and physics. This book aims to how remote sensing works, how to understand observations from earth-observing systems, and the observations' importance to physical and biological oceanography. It provides full explanations of radiative transfer, ocean surface properties, satellite orbits, instruments and methods.

Print ISBN: 9781682500743 | \$ 170 | Pub Year: 2016 | Hardcover

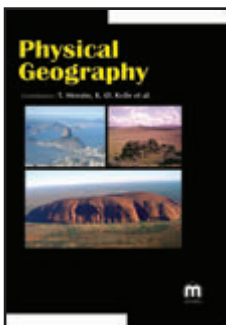


Urbanisation & Urban Planning

Contributors: Monica A. Dorning, Jennifer Koch et al.

Urbanisation is a population shift from rural to urban areas, "the gradual increase in the proportion of people living in urban areas", and the ways in which each society adapts to the change. It is predominantly the process by which towns and cities are formed and become larger as more people begin living and working in central areas. Rapid urbanisation presents new and substantial challenges, ranging from governance and citizenship to infrastructure, housing, and the environment. Urban planning is a technical and political process concerned with the use of land, protection and use of the environment, public welfare, and the design of the urban environment, including air, water, and the infrastructure passing into and out of urban areas such as transportation, communications, and distribution networks. This book focuses on key issues that emerge in rapidly growing cities of the developing world.

Print ISBN: 9781682500675 | \$ 170 | Pub Year: 2016 | Hardcover

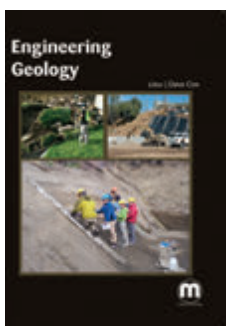


Physical Geography

Contributors: T. Morato, K. Ø. Kvile et al.

Physical geography is that branch of natural science which deals with the study of processes and patterns in the natural environment like the atmosphere, hydrosphere, biosphere, and geosphere, as opposed to the cultural or built environment, the domain of human geography. Physical Geography is a sub-discipline of two much larger fields of study—Geography and Earth Sciences. The main purpose of this book is to explain the spatial characteristics of the various natural phenomena associated with the Earth's hydrosphere, biosphere, atmosphere, and lithosphere.

Print ISBN: 9781682500873 | \$ 170 | Pub Year: 2016 | Hardcover



Engineering Geology

Editor: Dave Cox

Engineering geology is the application of the geological sciences to engineering study for the purpose of assuring that the geological factors regarding the location, design, construction, operation and maintenance of engineering works are recognized and accounted for. Engineering geology studies may be performed during the planning, environmental impact analysis, civil or structural engineering design, value engineering and construction phases of public and private works projects, and during post-construction and forensic phases of projects. This book covers the fields of the earth sciences and engineering, particularly geological and geotechnical engineering. The focus of the book is on geological or engineering studies that are of interest to engineering geologists.

Print ISBN: 9781682500712 | \$ 170 | Pub Year: 2016 | Hardcover



Soil Geography

Contributors: D. D. Eni, A. I. Iwara et al.

Soil geography is a branch of soil science that studies the pattern of distribution of soils on the earth's surface for the purpose of soil-geographic regionalization. There is general and regional soil geography. General soil geography studies the factors that influence soil formation and the most general laws of the geographic distribution of soils and types of soil structure. Regional soil geography is concerned with regionalization and with the description of the soils in individual regions. Soil Geography covers geographic methods to study the distribution of soils in relation to the factors influencing soil formation.

Print ISBN: 9781682500880 | \$ 170 | Pub Year: 2016 | Hardcover

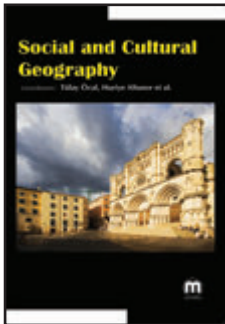


Ecology and Ecosystems

Editor: Edwin Morales

Ecosystem ecology is the integrated study of biotic and abiotic components of ecosystems and their interactions within an ecosystem framework. This science examines how ecosystems work and relates this to their components such as chemicals, bedrock, soil, plants, and animals. Ecosystem ecology observes physical and biological structures and studies how these ecosystem characteristics interrelate with each other. Eventually, this helps us maintaining high quality water and economically viable commodity production. This book brings out a general view on the biogeochemical cycles, the ecological imprints, the mathematical models and theories applicable to many situations.

Print ISBN: 9781682500897 | \$ 170 | Pub Year: 2016 | Hardcover

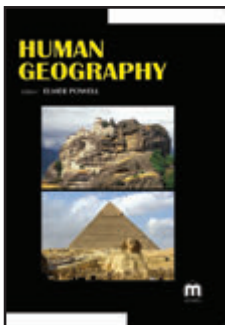


Social and Cultural Geography

Contributors: Tülay Öcal, Huriye Altuner et al.

Social geography is closely related to social theory in general and sociology in particular, dealing with the relation of social phenomena and its spatial components. In cultural geography, we study about cultural products and norms and their disparities and relations to spaces and places. It focuses on describing and analyzing the ways language, religion, economy, government and other cultural phenomena differ or persist constant, from one place to another and on explaining how humans function spatially. Social and Cultural Geography emphasizes on the topics with the spatialities of society and culture, particularly the role of space, place and culture in relation to social issues, cultural politics, aspects of daily life, cultural commodities, consumption, identity and community, and historical legacies.

Print ISBN: 9781682500927 | \$ 160 | Pub Year: 2016 | Hardcover

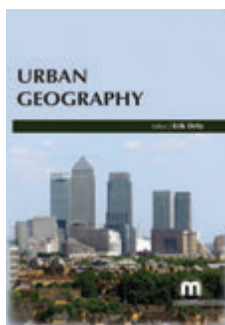


Human Geography

Editor: Elmer Powell

Human geography, the branch of the social sciences, deals with the world, its people and their communities, cultures, economies and relations with the environment by highlighting their relations with and across space and place. Physical geography and human geography are the subfields of physical geography, which concentrates upon the study of human activities, by the application of qualitative and quantitative research methods. This book envisages the systematic study of patterns and processes that have shaped human understanding, use, and alteration of earth's surface.

Print ISBN: 9781682500903 | \$ 170 | Pub Year: 2016 | Hardcover

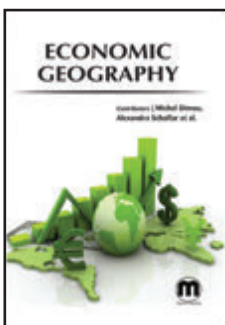


Urban Geography

Editor: Erik Ortiz

Urban geography, with reference to their geographical environment, is related to the study of urban places. It consists of origin of towns, their growth and development, their functions in and nearby their surroundings. Urban geographers are mainly focused with the ways in cities and towns are built, administered and practiced. Urban geography studies the effect of urban processes on the earth's surface's social and physical structures.

Print ISBN: 9781682500934 | \$ 170 | Pub Year: 2016 | Hardcover

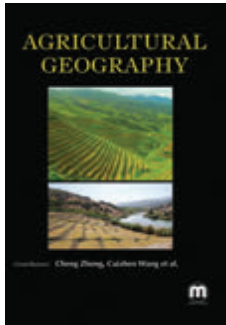


Economic Geography

Contributors: Michel Dimou, Alexandra Schaffar et al.

Economic geography is the study of the location, distribution and spatial organization of economic activities across the world. It represents a traditional subfield of the discipline of geography. However, in recent decades, many economists have also approached the field in ways more typical of the discipline of economics. Economic geography has taken numerous approaches to various dissimilar subject matters, as well as economies of agglomeration, transportation, international trade, development, real estate, gentrification, and globalization. This book gives an understanding of the geographic nature of economic systems and global economic change.

Print ISBN: 9781682500910 | \$ 170 | Pub Year: 2016 | Hardcover

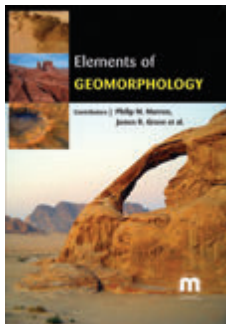


Agricultural Geography

Contributors: Cheng Zhong, Cuizhen Wang et al.

Agricultural geography is a subdiscipline of human geography. It is traditionally considered the branch of economic geography that investigates those parts of the Earth's surface that are transformed by humans through primary sector activities. What distinguishes the territorial distribution of agriculture from that of industry is the special nature of the relations between agricultural production and the natural environment, that is, the fact that land in this case is a means of production. The territorial distribution of agriculture obeys a variety of laws characteristic of the social and economic structure within which it is practiced. Agricultural Geography focuses on structures of agricultural landscapes and the processes that lead to these spatial patterns.

Print ISBN: 9781682500941 | \$ 170 | Pub Year: 2016 | Hardcover

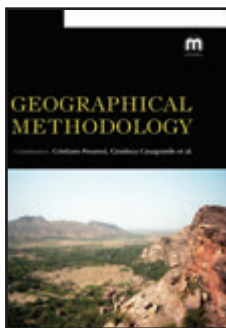


Elements of Geomorphology

Contributors: Philip M. Marren, James R. Grove et al.

Geomorphology is the scientific study of the origin and evolution of topographic and bathymetric landscapes. These landscapes are created by physical or chemical processes functioning at or around the earth's surface. Geomorphologists search for to understand why landscapes look the way they do, to know landform history and dynamics and to envisage changes through an arrangement of field observations, physical experiments and numerical modeling. Geomorphology is accomplished within physical geography, engineering geology, geodesy, archaeology, and geo-technical engineering. This book details on fundamentals of geomorphology and its elements.

Print ISBN: 9781682500958 | \$ 160 | Pub Year: 2016 | Hardcover

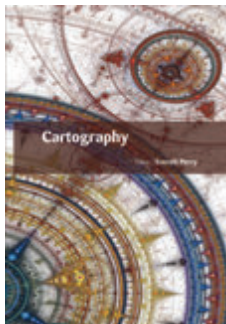


Geographical Methodology

Contributors: Cristiano Pesaresi, Gianluca Casagrande et al.

Geography is a field study of the lands, the features, the inhabitants, and the phenomena of earth. Nonetheless, modern geography is an all-encompassing discipline that foremost seeks to understand the earth and all of its human and natural complexities—not merely where objects are, but how they have changed and come to be. Geography has been called the world discipline and the bridge between the human and the physical science. Different methodological positions exist within geographical work, mainly related to the two main branches of the field, physical and human. This book offers a conceptual and practical introduction to research methodology, data collection, and techniques used in both human and physical geography.

Print ISBN: 9781682500989 | \$ 160 | Pub Year: 2016 | Hardcover



Cartography

Editor: Everett Perry

The study and practice of making maps is referred to cartography. Combining science, aesthetics, and technique, cartography builds on the basis that authenticity can be modeled in ways that link spatial information efficiently. Modern cartography, mostly integrated with geographic information science, organizes many theoretical and practical fundamentals of geographic information systems. In cartography, technology has continually changed in order to meet the demands of new generations of mapmakers and map users. The creation of more accurate maps and the ability to store and manipulate them digitally has evolved with the advent of magnetic devices. This book details the fundamentals and recent advances in cartography.

Print ISBN: 9781682500965 | \$ 170 | Pub Year: 2016 | Hardcover

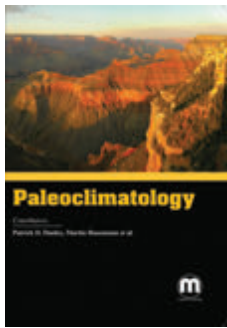


Biodiversity and its Conservation

Contributors: Cristina Menta et al.

Biodiversity is that part of nature which includes the differences in genes among the individuals of a species, the variety and richness of all the plant and animal species at different scales in space. This book deals with the biodiversity and its conservation; also it discusses about the diversity of plants and animals.

Print ISBN: 9781682501252 | \$ 170 | Pub Year: 2016 | Hardcover

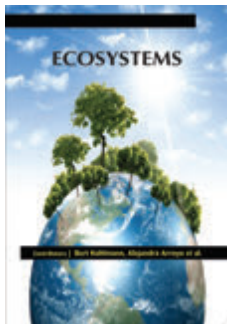


Paleoclimatology

Contributors: Patrick D. Danley, Martin Husemann et al.

Paleoclimatology is the study of past climates. Since it is not possible to go back in time to see what climates were like, scientists use imprints created during past climate, known as proxies, to interpret paleoclimate. Organisms, such as diatoms, foams, and coral serve as useful climate proxies. Paleoclimatology data are derived from natural sources such as tree rings, ice cores, corals, and ocean and lake sediments. These proxy climate data extend the archive of weather and climate information hundreds to millions of years. The data include geophysical or biological measurement time series and some reconstructed climate variables such as temperature and precipitation. This book offers the study of climate change and future predictions of climate.

Print ISBN: 9781682500972 | \$ 170 | Pub Year: 2016 | Hardcover



Ecosystems

Contributors: Bert Kohlmann, Alejandra Arroyo et al.

Ecosystem is a community of living organisms in conjunction with the nonliving components of their environment, interacting as a system. It examines the biological community that occurs in the physical and chemical factors that make up its non-living or abiotic environment. This book consists of the nature, types and characteristics of ecosystems as well as investigating the interactions between various systems and human actions.

Print ISBN: 9781682501269 | \$ 170 | Pub Year: 2016 | Hardcover

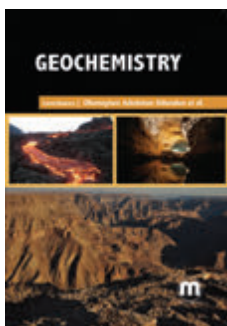


Biochemical and Environmental Toxicology

Contributors: M. K. Gautam and R. K. Goel et al.

Biochemical and environmental toxicology is the branch of biology, chemistry, and medicine concerned with the study of the adverse effects of chemicals on living organisms. The relationship between those and its effects on the exposed organism is of high significance in toxicology. This book examines the biochemical and environmental effect on toxicology.

Print ISBN: 9781682501511 | \$ 170 | Pub Year: 2016 | Hardcover

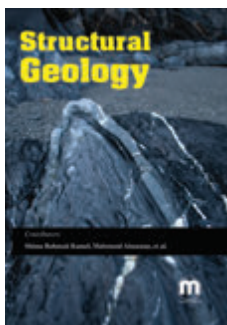


Geochemistry

Contributors: Olumuyiwa Adedotun Odundun et al.

Geochemistry is the study of the chemical makeup of the Earth, as well as the other planets and that uses the tools and principles of chemistry to explain the mechanisms behind major geological systems such as the Earth's crust and its oceans. This book focuses on the chemical reactions and processes which show them how various soils and rocks are created and also state, how the chemical components that move through the Earth interact with the atmosphere and the hydrosphere.

Print ISBN: 9781682502105 | \$ 170 | Pub Year: 2016 | Hardcover

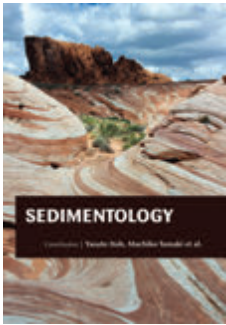


Structural Geology

Contributors: Shima Rahmati Kamel, Mahmood Almasian et al.

Structural geology is a subfield within geology which focuses on the study of geological structures, with the goal of learning how, when, and why they formed. It can take place in the field, with geologists making site visits to examine formations of interest personally, and in the lab. The primary goal of structural geology is to use measurements of present-day rock geometries to uncover information about the history of deformation in the rocks. This book provides unique links to industry applications in the upper crust, including petroleum and groundwater geology, which highlight the importance of structural geology in exploration of petroleum and water resources.

Print ISBN: 9781682502082 | \$ 170 | Pub Year: 2016 | Hardcover

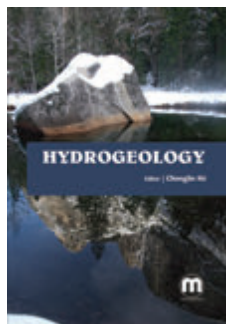


Sedimentology

Contributors: Yasuto Itoh, Machiko Tamaki et al.

Sedimentology is a branch of geology which is focused on the study of sedimentary rock and geological sediments. It encompasses the study of modern sediments such as sand, silt, and clay, and the processes that result in their formation (erosion and weathering), transport, deposition, and diagenesis. This book helps to the students of geology who have acquired a basic knowledge of mineralogy, petrology, and stratigraphy, and are ready to apply these skills to an exciting and challenging field.

Print ISBN: 9781682502099 | \$ 170 | Pub Year: 2016 | Hardcover



Hydrogeology

Editor: Chonglin Hé

Hydrogeology is the area of geology that deals with the distribution and movement of groundwater in the soil and rocks of the Earth's crust. The word extract the meaning of hydrogeology, where are meaning of hydro is water, and geology meaning the study of the Earth. The book presents a systematic approach to understanding groundwater and also find use among practitioners in hydrogeology, soil science, civil engineering and planning who are involved in environmental and resource protection issues requiring an understanding of groundwater.

Print ISBN: 9781682502112 | \$ 180 | Pub Year: 2016 | Hardcover

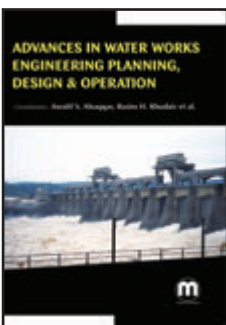


Palaeobiology and Stratigraphy

Contributors: Vsevolod V. Yutsis, Alexander N. Stafeev et al.

Paleobiology is a growing and comparatively new discipline which combines the methods and findings of the natural science biology with the methods and findings of the earth science paleontology. Stratigraphy is a branch of geology which studies rock layers and layering. It is primarily used in the study of sedimentary and layered volcanic rocks. The book presents a critical framework for assessing the fossil record, based on a modern understanding of the principles of sediment accumulation.

Print ISBN: 9781682502129 | \$ 180 | Pub Year: 2016 | Hardcover

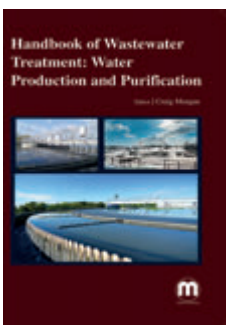


Advances In Water Works Engineering: Planning, Design, & Operation

Contributors: Awatif S. Alsaqqar, Basim H. Khudair et al. et al.

Water engineering is about how water interacts with all aspects of the built and natural environments. Water engineering looks at the way that natural systems such as rivers, estuaries and the coasts behave, as well as designing infrastructure to store and direct water. This book presents the state-of-the-art in water treatment facility design-and offer thorough, end-to-end guidance for successful planning, design, and operations. Water Works Engineering is essential reading for all professionals in the field: consulting engineers, equipment manufacturers, and regulatory professionals alike.

Print ISBN: 9781682500606 | \$180 | Pub Year: 2016 | Hardcover

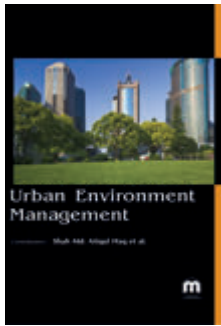


Handbook Of Wastewater Treatment: Water Production and Purification

Editor: Craig Morgan et al.

Wastewater treatment is a process to convert wastewater - which is water no longer needed or suitable for its most recent use-into an effluent that can be either returned to the water cycle with minimal environmental issues or reused. The stable increase in industrialization, urbanization, and enormous population growth are leading to production of huge quantities of wastewaters that may frequently cause environmental hazards. This makes waste water treatment and waste water reduction very important issues. This book offers a collection topics concerning waste water treatment and reuse.

Print ISBN: 9781682500613 | \$190 | Pub Year: 2016 | Hardcover

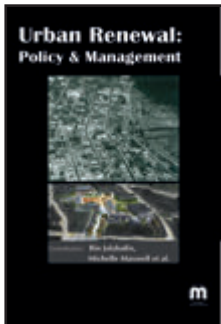


Urban Environment Management

Contributors: Shah Md. Atiqul Haq

Urban environment management (UEM) responds to the need to examine urban environment and housing problems from the management and planning perspectives to promote sustainable urban development. The UEM develops the capabilities and skills to confront deteriorating environmental conditions that threaten urban productivity, quality of life of urban residents and social cohesion of urban communities. Urban Environment Management looks at urban areas as the intersection of natural, built, and socio-economic environments, to create sustainable urban ecosystems. The objectives of this book are to explore local environmental problems of cities, as well as its impacts on global challenges.

Print ISBN: 9781682500682 | \$170 | Pub Year: 2016 | Hardcover

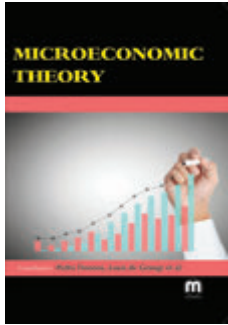


Urban Renewal: Policy & Management

Contributors: Bin Jalaludin, Michelle Maxwell et al.

Urban renewal, is a program of land redevelopment in areas of moderate to high density urban land use. Urban renewal involves the relocation of businesses, the demolition of structures, the relocation of people, and the use of eminent domain as a legal instrument to take private property for city-initiated development projects. Urban renewal has been seen by proponents as an economic engine and a reform mechanism, and by critics as a mechanism for control. It may enhance existing communities, and in some cases result in the demolition of neighborhoods. The book concentrates on urban renewal focusing on the social and physical aspects of this process.

Print ISBN: 9781682500699 | \$170 | Pub Year: 2016 | Hardcover

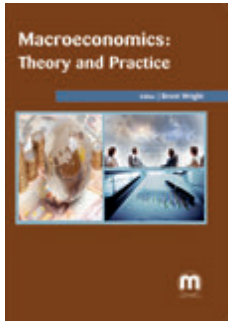


Microeconomic Theory

Contributors: Pedro Donoso, Louis de Grange et al.

Microeconomics, studies the behavior of individuals and firms in making decisions regarding the allocation of limited resources. Usually, it applies to markets where goods or services are bought and sold. Microeconomics examines how these decisions and behaviors affect the supply and demand for goods and services, which determines prices, and how prices, in turn, regulate the quantity supplied and quantity demanded of goods and services. Microeconomic Theory comprehensively covers all aspects of modern microeconomic theory and provides an in-depth analysis of the fundamentals of the subject. This book is designed to meet the needs of students, researchers and professionals in the economics program.

Print ISBN: 9781682500316 | \$ 160 | Pub Year: 2016 | Hardcover



Macroeconomics: Theory and Practice

Editor: Brent Wright

Macroeconomics study aggregated indicators such as GDP, unemployment rates, and price index, and the interrelations among the different sectors of the economy, to better understand how the whole economy functions. Over the last decades, macroeconomic theory and the practice of macroeconomics by economists have changed significantly—for the better. Macroeconomics is now firmly grounded in the principles of economic theory. We focus on the role of economic theory in shaping policy. The primary objective of the book is to teach how to conduct macroeconomic analysis. The book emphasizes the fact that we need models in order to analyze the real-world economic problems.

Print ISBN: 9781682500330 | \$ 160 | Pub Year: 2016 | Hardcover



Cost and Production Functions

Editor: Brandon Sanchez

Cost and production functions are indispensable tools for economics in general. In the process of decision-making, a manager should understand clearly the relationship between the inputs and output on one hand and output and costs on the other. There are several managerial uses of the production function. It can be used to compute the least-cost combination of inputs for a given output or to choose the input combination that yields the maximum level of output with a given level of cost. The production function is useful in deciding on the additional value of employing a variable input in the production process. Cost function expresses the relationship between cost and its determinants such as the size of plant, level of output, input prices, technology, managerial efficiency, etc. This book overviews on different approaches to examination of production and cost functions, analysis of some empirical estimates of these functions, and managerial uses of the estimated functions.

Print ISBN: 9781682500323 | \$ 170 | Pub Year: 2016 | Hardcover



Monetary Theory

Contributors: Xiaoli Gan and Wanbo L et al.

Monetary theory refers to the set of ideas about how monetary policy should be conducted within an economy. Monetary theory suggests that different monetary policies can benefit nations depending on their unique set of resources and limitations. It is based on core ideas about how factors like the size of the money supply, price levels and benchmark interest rates affect the economy. Economists and central banking authorities are typically those most involved with creating and executing monetary policy. This book details the procedures and consequences of monetary theory.

Print ISBN: 9781682500354 | \$ 170 | Pub Year: 2016 | Hardcover

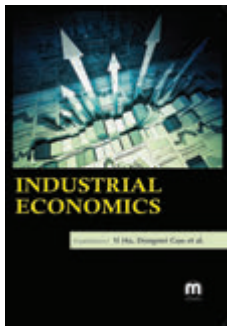


Handbook of Development and Environmental Economics

Contributors: Ekko van Ierland, Corjan Brink et al.

Handbook of Development and Environmental Economics is positioned at the intersection of environmental, resource and development economics. The main reason is that in our society the environment has become a scarce resource. Since economics is about how to deal with scarce resources, it can often be useful when tackling environmental problems. One way of using economics is to ensure that the costs and the benefits of environmental measures are well balanced. Reaching our objectives in an efficient and effective way is good for everyone. Smarter and simpler regulation makes it cheaper and easier for people, businesses and organizations to comply. In turn, this leads to a better environment.

Print ISBN: 9781682500361 | \$ 180 | Pub Year: 2016 | Hardcover

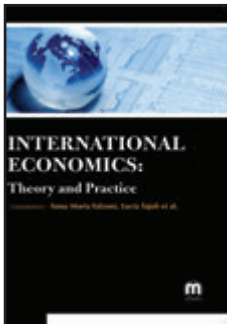


Industrial Economics

Contributors: Yi Hu, Dongmei Guo et al.

Industrial economics is the study of firms, industries and markets. It looks at firms of all sizes—from local corner shops to multinational giants. And it considers a whole range of industries, such as electricity generation, car production and restaurants. When analyzing decision making at the levels of the individual firm and industry, Industrial Economics helps us understand such issues as: the levels at which capacity, output and prices are set; the extent that products are differentiated from each other; how much firms invest in research and development (R&D) how and why firms advertise. This book covers wide-ranging economic analysis of the firm, its international structure, markets and competitors as well as external economic environment.

Print ISBN: 9781682500439 | \$ 170 | Pub Year: 2016 | Hardcover



International Economics: Theory and Practice

Contributors: Anna Maria Falzoni, Lucia Tajoli et al.

International economics is concerned with the effects upon economic activity from international differences in productive resources and consumer preferences and the international institutions that affect them. It seeks to explain the patterns and consequences of transactions and interactions between the inhabitants of different countries, including trade, investment and migration. This book presents exchanging ideas and business experiences at an international level. International Economics: Theory and Policy provides engaging, balanced coverage of the key concepts and practical applications of the two main topic areas of the discipline. For both international trade and international finance.

Print ISBN: 9781682500378 | \$ 160 | Pub Year: 2016 | Hardcover

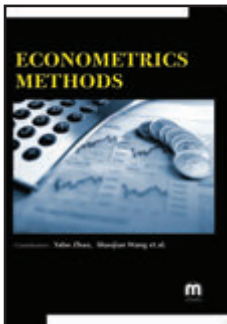


Handbook of Public Finance

Contributors: Mingxing Liu, Dong Zhang et al.

In public finance we study the finances of the Government. Thus, public finance deals with the question how the Government raises its resources to meet its ever-rising expenditure. Therefore, public finance has to play a special role of promoting economic growth in the developing countries besides maintaining price stability. Further, for developing countries mere economic growth is not enough; the composition of growing output and distribution of additional incomes ought to be such as will ensure removal of poverty and unemployment in the developing countries. Therefore, public finance has not only to augment resources for development and to achieve optimum allocation of resources, but also to promote fair distribution of income and expansion in employment opportunities. This book covers a wide variety of topics in the theory of public finance.

Print ISBN: 9781682500460 | \$ 180 | Pub Year: 2016 | Hardcover

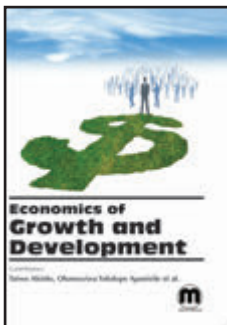


Econometrics Methods

Contributors: Yabo Zhao, Shaojian Wang et al.

Econometrics refers to the application of statistical and mathematical theories to economics for the purpose of testing hypotheses and forecasting future trends. Econometrics takes economic models and tests them through statistical trials. The results are then compared and contrasted against real-life examples. Applied econometrics uses theoretical econometrics and real-world data for assessing economic theories, developing econometric models, analyzing economic history, and forecasting. Econometrics may use standard statistical models to study economic questions, but most often they are with observational data, rather than in controlled experiments. This book focuses on recent developments in econometrics.

Print ISBN: 9781682500408 | \$ 170 | Pub Year: 2016 | Hardcover

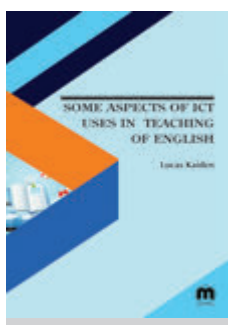


Economics of Growth and Development

Contributors: Taiwo Akinlo, Olumuyiwa Tolulope Apanisile et al.

Economic development is a process whereby an economy's real national income as well as per capita income increases over a long period of time. Economic development, as it is now generally understood, includes the development of agriculture, industry, trade, transport, means of irrigation, power resources, etc. It, thus, indicates a process of development. The sectoral improvement is the part of the process of development which refers to the economic development. Economic growth is generally calculated from data on GDP and population provided by countries' statistical agencies. This book covers the principles and practices of economic growth and development.

Print ISBN: 9781682500477 | \$ 160 | Pub Year: 2016 | Hardcover

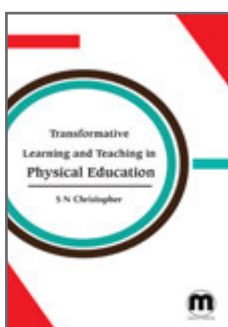


Some Aspects of ICT Uses in Teaching of English

Editor: Lucas Kaiden

English and ICT have become essential tools for a number of non-datum and emotions of everyday life. This book integrates latest studies and reviews which examine the advantages of integrating ICT in language education in general and English as a Second Language (ESL) teaching and learning in particular. In the context of the global exchange the role of ICT has become inevitable in the 21st century. This book also reviews and present some representative studies on this field during the last decade.

Print ISBN: 978-1-68250-509-0 | \$145 | 2019 | Hardcover



Transformative Learning and Teaching in Physical Education

Editor: S N Christopher

Covering the current trends and challenges in physical education, the book presents insights into a wide range of educational experiences. This book also explores the association between physical activity and children's learning on the basis of recent research results. It is intended for teachers, teaching staff, directors of municipal educational and cultural services and others involved in making decisions on education.

Print ISBN: 978-1-68250-510-6 | \$150 | 2019 | Hardcover

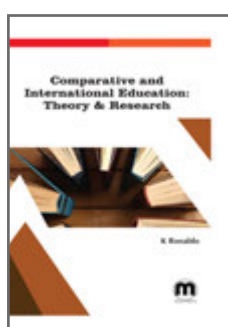


International Education: Changing Perspectives

Editor: Jong-Sun Kim

In today's globalized world, an effective domestic education agenda must address global needs and trends and aim to develop a globally competent citizenry. This book is intended to provide university administrators, policy makers, and educational planners with a historical perspective on the accomplishments of programs and new insights into the directions currently affecting international studies.

Print ISBN: 978-1-68250-511-3 | \$150 | 2019 | Hardcover

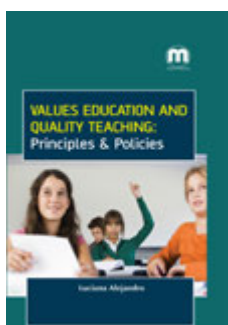


Comparative and International Education: Theory & Research

Editor: K Ronaldo

This book explores major issues in education today through international and intercultural research. The book shifts to an analysis of the significance of new spatial theorizing for comparative and international education. Covering the wide-ranging perspectives of global educational practices, contributions from eminent researchers and authors, this book is valuable guide for teachers, practitioners, and comparative education scholars.

Print ISBN: 978-1-68250-512-0 | \$145 | 2019 | Hardcover

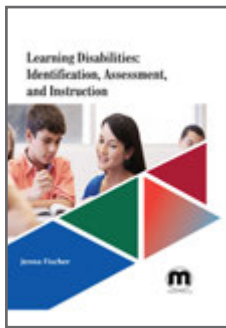


Values Education and Quality Teaching: Principles & Policies

Editor: Luciana Alejandro

Education helps people to become a useful member of the society and to develop an appreciation of their culture heritage and live more satisfying human lives. The need of value education in today's context cannot be overemphasized. These days we are all surrounded by gross consumerism and an aggressive rush for self-fulfillment. Moreover, the social system worldwide is undergoing great transformation. This book addresses the key problems, topics and issues relevant to questions about the nature, purpose and scope of values education that are internationally generalizable and, in times of rapid change, of enduring interest to the scholar and practitioner.

Print ISBN: 978-1-68250-513-7 | \$145 | 2019 | Hardcover



Learning Disabilities: Identification, Assessment, and Instruction

Editor: Jenna Fischer

Nature is very diverse and hence there exist a lot of differences amongst humans due to their genetic constitution. Learning disabilities, or learning disorders, are an umbrella term for a wide variety of learning problems. Emphasizing real-world utility, this book provides important information for professionals who work with children and youth at risk as well as researchers dealing with the field. It is intended to examine of assessment methods, preventative measures, intervention, and research with those individuals with learning disabilities.

Print ISBN: 978-1-68250-514-4 | \$150 | 2019 | Hardcover



Research Methods for Sports Studies

Editor: I R Daniel

In the last decade, there has been a plethora of studies using “non-traditional” research methods in the study of physical activity. A comprehensive, engaging and practical guide intended to cover in the field of sport psychology and management, and to show how the intellectual structure of the field has changed over time. Contemporary aspects of research methods in sport are discussed with a complete grounding in both qualitative and quantitative research methods for the sports studies.

Print ISBN: 978-1-68250-515-1 | \$145 | 2019 | Hardcover

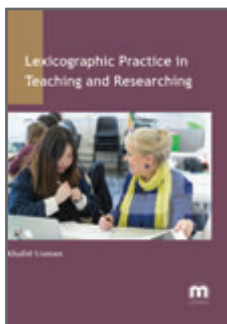


Motivating Learning and Teaching

Editor: Lerry Morgan

Motivation is important in getting students to engage in academic activities. It is also important in determining how much students will learn from the activities they perform or the information to which they will be exposed to. Students who are motivated to learn something use higher cognitive processes in learning about it. This work reviews methods in which students can be encouraged to engage more positively in their own learning, a process that benefits both the child and the whole school community.

Print ISBN: 978-1-68250-429-1 | \$150 | 2018 | Hardcover

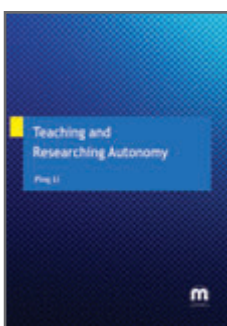


Lexicographic Practice in Teaching and Researching

Editor: Khalid Usman

The prominence of a dictionary in modern life is enormous. Its functional relevance is further increased in semi-advanced and underdeveloped countries with perceptible growth of education. This work presents emphases on the global issues of lexicographic interest, and looks at some prevailing diverse uses and interpretations of the word lexicography. It will be of interest for researchers, lexicographers, students, teachers, translators, and all language lovers from around the globe.

Print ISBN: 978-1-68250-430-7 | \$150 | 2018 | Hardcover



Teaching and Researching Autonomy

Editor: Ping Li

There has been a significant growth of interest in the theory and practice of autonomy in language teaching and learning in recent years. Many new approaches and innovations have been used to develop learner autonomy in foreign language education. This work provides wide ranging coverage of the theory and practice of learner autonomy and self-directed language learning. New approaches on learner autonomy in foreign language learning and teaching will be highlighted.

Print ISBN: 978-1-68250-431-4 | \$150 | 2018 | Hardcover

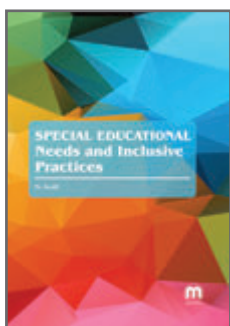


Research Methods in Education

Editor: Jianping Liu

Language is a means of conveying ideas to others. This can also to a certain extent be done by the use of gestures and signs. Literature has the capacity to incorporate within itself the entire universe of discourses. In fact the scope of literature is everything which can come into the human mind. It includes everything from Mathematics to Philosophy and to the other intricate sciences. This book intends to discuss the function of language and literature and the difference between language and literature. It also aims to discuss the purpose, aim and benefit of studying literature.

Print ISBN: 978-1-68250-436-9 | \$150 | 2018 | Hardcover

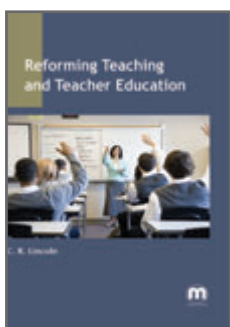


Special Educational Needs and Inclusive Practices

Editor: N. Scott

Addressing and accepting learners with special educational needs speaks to the value of every child and models understanding, flexibility and acceptance of the differences people will encounter not only in childhood, but throughout life. It provides a wider global overview of the most relevant inclusive education theories. It presents a multifocal perspective on national educational policies and the current approaches to the identification and assessment of special educational needs and the provision of additional supports.

Print ISBN: 978-1-68250-481-9 | \$150 | 2018 | Hardcover



Reforming Teaching and Teacher Education

Editor: C. R. Lincoln

Teacher education reform in many countries constitutes a crucial part of a broader educational reform intended to improve teaching practice and student performance. Teacher education reform has thus become an international trend, which, different national contexts and traditions notwithstanding, shares a set of similar expectations, foci, and even policy interventions. In this book, the interactions between individual teachers' beliefs about teaching and learning science in elementary school and the tools of reform that are imposed upon them.

Print ISBN: 978-1-68250-482-6 | \$150 | 2018 | Hardcover

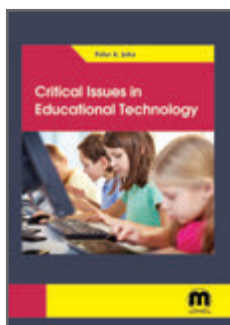


Learning Technologies and Interactive Designs

Editor: I. Ronaldo

Learning is changing in the 21st century. Technologies used in learning, such as interactive whiteboards, personal learning environments, wireless networks and mobile devices, plus the internet and high-quality digital learning resources – and the ability to access many of these from home and the workplace – are altering the experiences and aspirations of learners. This collection discusses the underlying mechanisms upon which these systems are based. Modern research has broadened scientific knowledge and revealed the interdisciplinary nature of the sciences.

Print ISBN: 978-1-68250-483-3 | \$145 | 2018 | Hardcover



Critical Issues in Educational Technology

Editor: Polor K. John

Education researchers have observed that government and institutions are expending huge sum of money on technology in education as an indication of development and improvement in schools. This book, specifically designed for students, researchers, and practitioners, brings together conceptual and empirical studies that examine critical issues around technology integration in education. It highlights some issues that are critical in evaluating technology in education such that it will be implemented to meet educational goals and it will also serve as a spotlight for policy makers and educators.

Print ISBN: 978-1-68250-484-0 | \$150 | 2018 | Hardcover

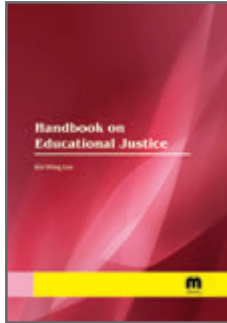


Global Perspectives on Higher Education

Editor: Maria J. Kunt

In the early 21st century, higher education has become a competitive enterprise. Higher education worldwide is in a period of transition, affected by globalization, the advent of mass access, changing relationships between the university and the state, and the new technologies, among others. This work brings together review articles, comparative studies and analyses of particular problems or issues contributed by leading scholars from different countries who tackle the problems of teachers as well as students, and of planners as well as administrators.

Print ISBN: 978-1-68250-485-7 | \$145 | 2018 | Hardcover



Handbook on Educational Justice

Editor: Kin Wing Lee

This work, a comprehensive and up-to-date review of the field, addresses, from multiple perspectives, education theory, research, and practice in historical and ideological context. It aims to sort through the social justice literature in education in order to develop a better understanding of what this work is all about and why it is important. This book will be of valuable for researchers, professionals, and students across the fields of educational foundations, multicultural/diversity education, educational policy, and curriculum and instruction.

Print ISBN: 978-1-68250-486-4 | \$145 | 2018 | Hardcover

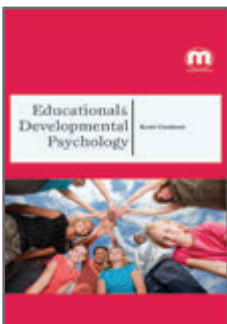


Foundations of Distance Education

Editor: Steve Parker

Over the past few years, distance education and training facility has expanded radically. Distance education opens endless possibilities in the fields of education and training. This work covers concepts and principles of distance learning, the theoretical underpinnings of the field, research and application literature, and distance education delivery technologies. A systematic approach to the design, development, delivery, and evaluation of instruction for learners at a distance is emphasized.

Print ISBN: 978-1-68250-491-8 | \$145 | 2018 | Hardcover

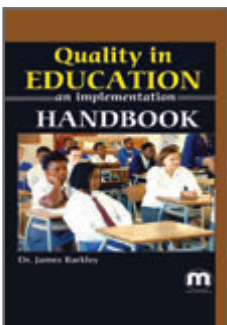


Educational & Developmental Psychology

Editor: Kent Goodson

Educational and developmental psychologists focus on how people develop and learn throughout their lifetime. They work with individuals, families, groups, and organizations in a range of settings and have varying roles such as school psychologist, guidance officer, and child and adolescent counsellor. They conduct psychological and educational assessments and instructional planning for exceptional children, adolescents and adults. This book provides authoritative reviews of key areas of research in developmental psychology and demonstrates how these can inform practice in early years educational settings.

Print ISBN: 978-1-68250-369-0 | \$140 | 2017 | Hardcover



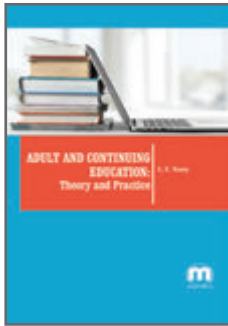
Quality in Education: An Implementation Handbook

Editor: Dr. James Barkley

The right to education is not only the right to access education but also the right to receive an education of good quality. Education must be available and accessible but also acceptable and adaptable. Quality education is not an easy concept to qualify. Quality determines how much and how well children learn and the extent to which their education translates into a range of personal, social and developmental benefits. This handbook explains the importance of making a commitment to change and establishing a shared vision of quality, and discusses tools and techniques for overcoming resistance and developing a quality culture.

Print ISBN: 978-1-68250-373-7 | \$160 | 2017 | Hardcover

Education

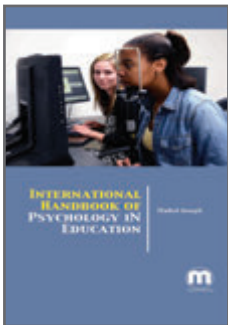


Adult and Continuing Education: Theory and Practice

Editor: L.T. Tony

Adult education is a practice in which adults engage in systematic and sustained self-educating activities in order to gain new forms of knowledge, skills, attitudes, or values. This book takes account of many changes which have occurred in the field of adult education. The Adult and Continuing Education is designed to provide enrichment to adults in the community who seek opportunities to feed the mind, body, and spirit.

Print ISBN: 978-1-68250-370-6 | \$140 | 2017 | Hardcover

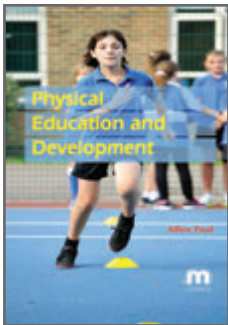


International Handbook of Psychology in Education

Editor: Maikel Joseph

Educational psychology is concerned with how students learn and develop, often focusing on subgroups such as gifted children and those subject to specific disabilities. Psychologists in university psychology and education departments can have an interest in applied psychologies and practitioner psychology. Clinical and educational psychologists work with the problems of children and parents. Suitable for researchers, practitioners and advisers working in the fields of psychology and education, this title presents an overview of the research within the domain of psychology of education.

Print ISBN: 978-1-68250-372-0 | \$160 | 2017 | Hardcover

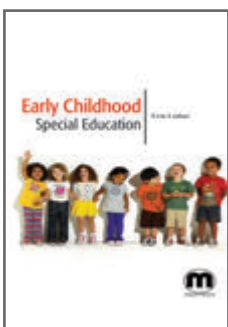


Physical Education and Development

Editor: Allen Paul

Physical Education is education through the physical. It aims to develop students' physical competence and knowledge of movement and safety, and their ability to use these to perform in a wide range of activities associated with the development of an active and healthy lifestyle. It also develops students' confidence and generic skills, especially those of collaboration, communication, creativity, critical thinking, and aesthetic appreciation.

Print ISBN: 978-1-68250-377-5 | \$140 | 2017 | Hardcover

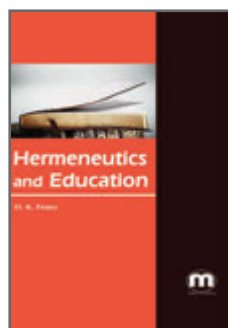


Early Childhood Special Education

Editor: Erin Luthar

Early childhood is a period of rapid learning and development and nationally recognized as a crucial time for the early identification and support of young children with special needs. Early Childhood Special Education provides the tools and strategies special education teachers and therapists need to work cooperatively and effectively with other professionals. This book presents information on working with diverse cultural groups, technological aids for special education, child development theories and their practical application.

Print ISBN: 978-1-68250-368-3 | \$140 | 2017 | Hardcover

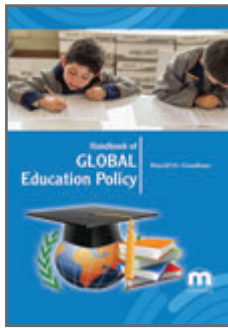


Hermeneutics and Education

Editor: D. K. Franz

Hermeneutics is the theory and methodology of text interpretation, especially the interpretation of biblical texts, wisdom literature, and philosophical texts. It started out as a theory of text interpretation but has been later broadened to questions of general interpretation. This book confronts the challenges that hermeneutics brings to ethics and education by thematizing the critical influence which ethics and contemporary educational theory and practice. By explicating, illustrating and demonstrating hermeneutic phenomenology as a method for research in education specifically, it also offers an excellent resource for beginning as well as more advanced researchers.

Print ISBN: 978-1-68250-374-4 | \$140 | 2017 | Hardcover

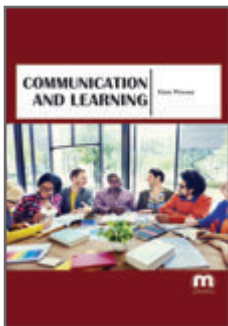


Handbook of Global Education Policy

Editor: David H. Goodson

Global education is a creative approach of bringing about change in our society. Global education is an active learning process based on the universal values of tolerance, solidarity, equality, justice, inclusion, co-operation and non-violence. Global education emphasizes the unity and interdependence of human society, developing a sense of self and appreciation of cultural diversity, affirmation of social justice and human rights, as well as building peace and actions for a sustainable future in different times and places. This innovative new handbook proposes a comprehensive overview of the ways in which domestic education policy is framed and influenced by global institutions and actors.

Print ISBN: 978-1-68250-383-6 | \$150 | 2017 | Hardcover

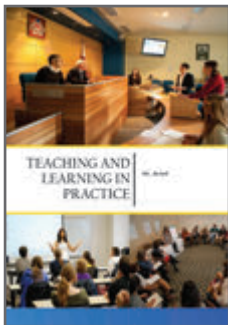


Communication and Learning

Editor: Eion Pessoa

This is not to say that learning is communication, nor is it to say that academic performance exists in a simple causal relationship to successful classroom communication: Successful communication between the teacher and students is a necessary condition of academic achievement. Effective teaching presupposes effective communication. The teacher makes effective communication possible by identifying the needs of the students, addressing these needs at the appropriate level, and creating a relaxed atmosphere in which a free, democratic flow of discussion is possible. This book focuses on how far the policies, principles, and practices of language teaching and learning are, or can be, informed by theoretical considerations and empirical findings from the linguistic disciplines. This book deals with research and practice in communication and communication technologies of language learning and teaching.

Print ISBN: 978-1-68250-375-1 | \$140 | 2017 | Hardcover

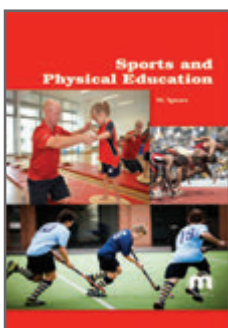


Teaching and Learning in Practice

Editor: M. Arief

Effective Teaching and Learning in Practice is a book for all students in initial teacher education. Its insights, ideas and practical advice should also prove valuable to serving teachers and especially those undertaking further professional development. It is intended for anyone who takes understanding of modern ideas, research and developments in teaching and learning, and who is committed to becoming professionally skilled in the range of roles now required of teachers. It enables teachers to develop professional judgement based on good theoretical understanding, awareness of research findings and considered reflections on practice. This subject introduces principles and practices associated with both teaching and facilitating learning, which are relevant for a range of adult learning contexts.

Print ISBN: 978-1-68250-376-8 | \$140 | 2017 | Hardcover

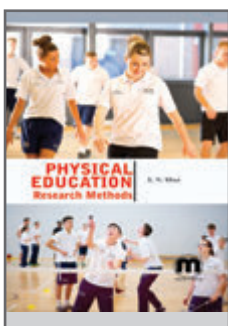


Sports and Physical Education

Editor: W. Spears

Physical education trends have developed recently to incorporate a greater variety of activities besides typical sports. Introducing students to activities like bowling, walking/hiking, or frisbee at an early age can help students develop good activity habits that will continue into adulthood. This book offers an illuminating insight into sport and physical education. It represents fascinating reading for anyone with an interest in the history and sociology of sport.

Print ISBN: 978-1-68250-378-2 | \$140 | 2017 | Hardcover



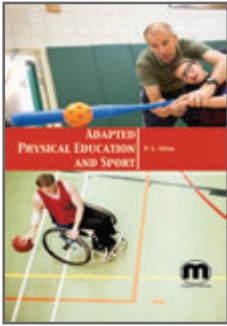
Physical Education Research Methods

Editor: K. N. Khan

Physical education develops fitness and fosters the desire for lifelong participation in physical activity high school curriculum prepares students to become highly proficient in one or more sport and/or fitness activity of their choice. This book systematically guides students through the research process, introducing methods and tools specifically for kinesiology and exercise science disciplines, including the sub-disciplines of physical therapy, rehabilitation, and occupational therapy.

Print ISBN: 978-1-68250-380-5 | \$140 | 2017 | Hardcover

Education

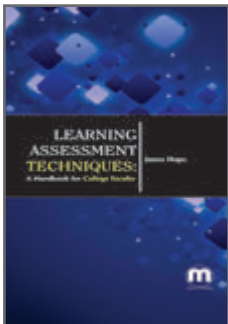


Adapted Physical Education and Sport

Editor: P. L. Stine

Physical education is a course that focuses on developing physical fitness in the youth. Same as Music, Gym and Math, this is a required course in primary and secondary school. Most of the time, it is also required in college. This book offers an illuminating insight into how sport and physical education have helped to student. The book highlights the importance of physical education in the primary curriculum and the key issues facing primary teachers today, such as inclusion, training needs and the development of creativity.

Print ISBN: 978-1-68250-381-2 | \$140 | 2017 | Hardcover



Learning Assessment Techniques: A Handbook for College Faculty

Editor: James Hope

Assessment of learning is the assessment that becomes public and results in statements or symbols about how well students are learning. It often contributes to pivotal decisions that will affect students' futures. It is important, then, that the underlying logic and measurement of assessment of learning be credible and defensible. This book guide teachers through the learning assessment techniques planning and implementation cycle.

Print ISBN: 978-1-68250-384-3 | \$140 | 2017 | Hardcover



Collaborative Learning Techniques

Editor: Dlive Cussler

In education, collaborative learning is a technique teacher's use to group students together to impact learning in a positive way. Proponents of collaborative learning believe it helps students in many ways. Collaborative learning can occur between just two students or within a larger group, and it can take a variety of forms. Collaborative learning is a situation in which two or more people learn or attempt to learn something together. Unlike individual learning, people engaged in collaborative learning capitalize on one another's resources and skills. This landmark book introduces the concepts and principles of collaborative learning techniques.

Print ISBN: 978-1-68250-382-9 | \$140 | 2017 | Hardcover

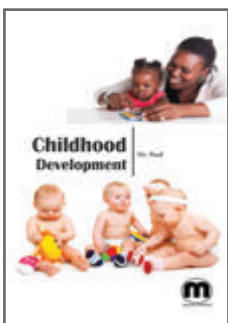


Physical Education: Teaching and Curriculum Strategies

Editor: David H. Kirk

Physical education is an educational course related to the physique of the human body. Physical education teachers help children develop physical abilities and healthy habits that can last for the rest of their lives. Physical education (PE) teachers organize games and challenges that promote physical activity among children and young adults from kindergarten to high school. Physical Education teachers must adjust their curricula to adapt to children with disabilities or different physical abilities. This innovative resource guides readers through the process of writing dynamic curriculum and teaching strategies in physical education.

Print ISBN: 978-1-68250-379-9 | \$140 | 2017 | Hardcover

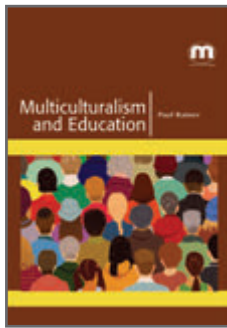


Childhood Development

Editor: Dr. Paul

Child development refers to the biological, psychological, and emotional changes that occur in human beings between birth and the end of adolescence, as the individual progresses from dependency to increasing autonomy. It is a continuous process with a predictable sequence yet having a unique course for every child. This book examines contemporary issues in the field of child and adolescent development. It features the latest research on growth and development during the prenatal, infant, toddler, preschool, middle childhood, and adolescent periods.

Print ISBN: 978-1-68250-387-4 | \$140 | 2017 | Hardcover



Multiculturalism and Education

Editor: Paul Ratner

Multicultural education refers to any form of education or teaching that incorporates the histories, texts, values, beliefs, and perspectives of people from different cultural backgrounds. Multicultural education experiences education practices in multicultural environments. This comprehensive overview focuses on educational philosophy that focuses on celebrating cultural differences while also recognizing the importance of challenging all forms of discrimination based on race, gender, age, religion, ability, or sexual orientation.

Print ISBN: 978-1-68250-385-0 | \$140 | 2017 | Hardcover



Adult Development

Editor: Piter Calvin

Adult development encompasses the changes that occur in biological, psychological, and interpersonal domains of human life from the end of adolescence until the end of one's life. These changes may be gradual or rapid, and can reflect positive, negative, or no change from previous levels of functioning. This book covers the specific ages-stages of adult development and aging.

Print ISBN: 978-1-68250-386-7 | \$140 | 2017 | Hardcover

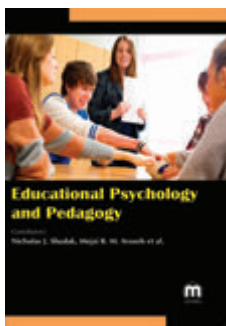


Education and Human Development

Contributors: Majed Rabhan Wadaani et al.

Our rapidly changing world needs people who are lifelong learners. Human Development and Education (HDE) program prepares students to investigate children's learning and development as these occurs within the contexts of schooling and the family. Learning for a lifetime is designed to create a culture that supports high-impact learning experiences and fosters student commitment to developing the knowledge, habits and skills needed to make an impact throughout their life, adapt to change and create new opportunities for themselves and others. This book envisages on the processes of learning and development of children and adolescents from a wide array of backgrounds and ability levels.

Print ISBN: 9781682500804 | \$ 160 | Pub Year: 2016 | Hardcover



Educational Psychology and Pedagogy

Contributors: Nicholas J. Shudak, Mejai B. M. Avoseh et al.

Educational psychology is the branch of psychology concerned with the scientific study of human learning. The study of learning processes, from both cognitive and behavioral perspectives, allows researchers to understand individual differences in intelligence, cognitive development, affect, motivation, self-regulation, and self-concept, as well as their role in learning. It appears to be a greater need for the next generation of educational psychologists to have knowledge of a subject matter field and to have a developmental perspective. They also need an awareness of the social context of learning. They should have training in the methodologies uniquely associated with cognitive psychology and qualitative research and experience with alternative forms of student and teacher assessment. They will also need to better understand how case and procedural knowledge are acquired and develop. This book is designed to plan and teach the students in classroom about instructional strategies, expository approaches and more.

Print ISBN: 9781682500811 | \$ 160 | Pub Year: 2016 | Hardcover



Statistics in Education

Editor: Dwayne Hughes

Statistics education is the practice of teaching and learning of statistics, along with the associated scholarly research. Statistics is both a formal science and a practical theory of scientific inquiry, and both aspects are considered in statistics education. Education in statistics has similar concerns as does education in other mathematical sciences. At the same time, statistics is concerned with evidence-based reasoning, particularly with the analysis of data. Therefore education in statistics has strong similarities to education in empirical disciplines like psychology and chemistry, in which education is closely tied to hands-on experimentation. This book aims to advance research based knowledge that can help to improve the teaching, learning, and understanding of statistics or probability at all educational levels and in both formal and informal contexts.

Print ISBN: 9781682500828 | \$ 160 | Pub Year: 2016 | Hardcover



Entrepreneurship Education and Training

Editor: Jie Yang

Entrepreneurship has a tremendous impact on the economic development of a country, so much that entrepreneurship is seen as a solution for the fast changing economic demands worldwide and has been recognized as a path to sustainable economic development. Because education is key to shaping young people's attitudes, skills and culture, it is vital that entrepreneurship education is addressed from an early age. Entrepreneurship education is essential not only to shape the mindsets of young people but also to provide the skills and knowledge that are central to developing an entrepreneurial culture. This book details on the experiences in entrepreneurship education, explain how to teach entrepreneurial skills, cultural issues, and propose some orientations and reflections on entrepreneurship education.

Print ISBN: 9781682502600 | \$ 160 | Pub Year: 2016 | Hardcover



Educational Technology

Contributors: Elomar Christina Vieira Castilho Barilli et al.

Educational technology emphasizes communication skills and approaches to teaching and learning through the judicious use and integration of diverse media. Scholars in the field examine the uses of innovative media and technologies for education, examining all aspects from direct student learning to management and impacts on institutions. As in all forms of applied technology, the field studies how theoretical knowledge and scientific principles can be applied to problems that arise in a social context. Practitioners in educational technology seek new and effective ways of organizing the teaching and learning process through the best possible application of technological developments. These activities rely upon a body of knowledge for successful and ethical implementation, rather than routine tasks or isolated technical skills. This book focuses on effective processes to facilitate learning using technologies and understanding the impacts of technology on learners and organizations.

Print ISBN: 9781682500859 | \$ 160 | Pub Year: 2016 | Hardcover



Micro-Nano Mechatronics: New Trends

Editor: Aaron Smith

Micro and Nano Mechatronics is the synergistic integration of micro and nano electromechanical systems and electronic technologies, with high added value. Micro/Nano mechatronics is currently used in broader spectra, ranging from basic applications in robotics, actuators, sensors, semiconductors, automobiles, and machine tools. Strong research efforts are being focused on development of organic combinations of multiple miniaturized actuators and sensors to perform complex motions and operations. Micro/nano technologies, as very important technologies for future robotics and automation, are becoming crucial to realizing high performance systems. The book of Micro-Nano Mechatronics: Future trends is devoted to the theory and applications of micro and nanotechnologies.

Print ISBN: 9781682500002 | \$ 170 | Pub Year: 2016 | Hardcover

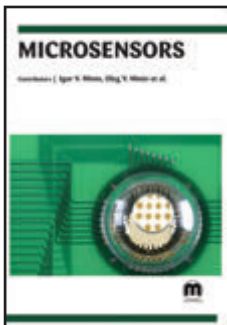


Fuzzy Controllers: Recent Advances in Theory and Applications

Editor: Adam Johnson

A fuzzy control system is a control system based on fuzzy logic—a mathematical system that analyzes analog input values in terms of logical variables that take on continuous values between 0 and 1, in contrast to classical or digital logic, which operates on discrete values of either 1 or 0. These systems range all the way from classical inverted pendulum to auto-focusing system of a digital camera. Fuzzy control systems have demonstrated their enhanced performance in all these areas. This book is envisioned for researchers, engineers, and postgraduate students specializing in fuzzy systems, control engineering, and robotics.

Print ISBN: 9781682500019 | \$ 170 | Pub Year: 2016 | Hardcover

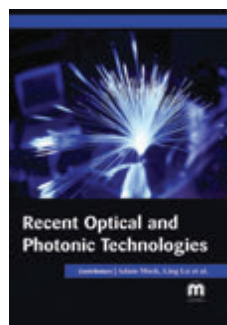


MICROSENSORS

Contributors: Igor V. Minin, Oleg V. Minin et al.

Microsensor is a very small sensor with physical dimensions in the submicrometer to millimeter range. A sensor is a device that converts a nonelectrical physical or chemical quantity, such as pressure, acceleration, temperature, or gas concentration, into an electrical signal. Sensors are an essential element in many measurement, process, and control systems, with countless applications in the automotive, aerospace, biomedical, telecommunications, environmental, agricultural, and other industries. The objective of the book is to provide topics in the area of microsensors for engineers, scientists, applied physicists and post-graduate students. Also the aim of the book is the continuous and timely dissemination of new and innovative research and developments in microsensors.

Print ISBN: 9781682502723 | \$ 170 | Pub Year: 2016 | Hardcover



Recent Optical and Photonic Technologies

Contributors: Adam Mock, Ling Lu et al. et al.

Research and development in modern optical and photonic technologies have witnessed quite fast growing innovations in numerous fundamental and application areas due to availability of novel fabrication and measurement techniques, advanced numerical simulation tools and methods, as well as due to the increasing practical demands. The recent advancements have also been accompanied by the appearance of various interdisciplinary topics. The book attempts to put together state-of-the art research and development in optical and photonic technologies.

Print ISBN: 9781682502730 | \$ 170 | Pub Year: 2016 | Hardcover

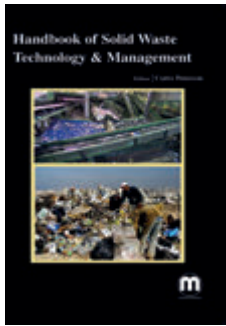


Robotic Systems: Applications, Control, and Programming

Contributors: Ayssam Elkady, Tarek Sobh et al.

Robotics deals with the design, construction, operation, and application of robots, as well as computer systems for their control, sensory feedback, and information processing. This book brings together some of the latest research in robot applications, control, modeling, sensors, and algorithms.

Print ISBN: 9781682500026 | \$ 170 | Pub Year: 2016 | Hardcover

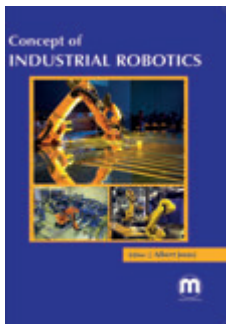


Handbook of Solid Waste Technology & Management

Editor: Curtis Peterson

Solid waste management is one of the major challenges faced by many countries around the globe. Inadequate collection, recycling or treatment and uncontrolled disposal of waste in dumps can lead to severe hazards, such as health risks and environmental pollution. The management of solid waste typically involves its collection, transport, processing and recycling or disposal. Collection includes the gathering of solid waste and recyclable materials, and the transport of these materials, after collection, to the location where the collection vehicle is emptied. The aim of this book is to offer an integrated approach to the planning, design, and management of economical and environmentally responsible solid waste disposal system.

Print ISBN: 9781682500620 | \$ 180 | Pub Year: 2016 | Hardcover

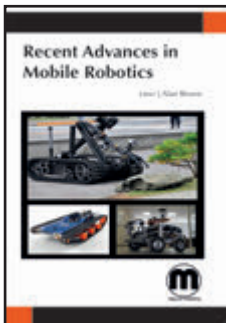


Concept of Industrial Robotics

Editor: Albert Jones

Industrial robot is an automatically controlled, reprogrammable, multipurpose manipulator programmable in three or more axes, which may be either fixed in place or mobile for use in industrial automation applications. The field of robotics may be more practically defined as the study, design and use of robot systems for manufacturing. Typical applications of robots include welding, painting, assembly, pick and place, product inspection, and testing; all accomplished with high endurance, speed, and precision. This book emphasizes on the features and trends in industrial robotics.

Print ISBN: 9781682500040 | \$ 170 | Pub Year: 2016 | Hardcover



Recent Advances in Mobile Robotics

Editor: Alan Brown

A mobile robot is an automatic machine that is capable of locomotion. Mobile robots have the capability to move around in their environment and are not fixed to one physical location. Mobile robots can be "autonomous" which means they are capable of navigating an uncontrolled environment without the need for physical or electro-mechanical guidance devices. The book Recent Advances in Mobile Robotics addresses the topic by integrating contributions from many researchers around the globe. It emphasizes the computational methods of programming mobile robots, rather than the methods of constructing the hardware.

Print ISBN: 9781682500033 | \$ 170 | Pub Year: 2016 | Hardcover

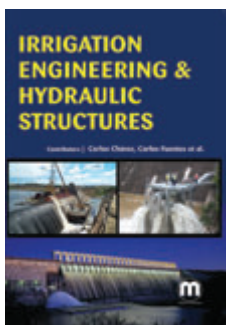


Instrumentation and Measurement: Fundamentals

Contributors: Matthew R Foreman, Peter Török et al.

Instrumentation includes scientific activities and technologies that are related to measurement. It is a relation between physical, chemical and biological phenomena and their awareness by humans. Continually evolving, instrumentation changes how we live and plays a major role in industrial and life sciences; it is also essential to the fundamental sciences. So as to be credible, all new theories must undergo a series of experimental validations, of which instrumentation is the foundation. A measuring instrument is a device for measuring a physical quantity. In the physical sciences, quality assurance, and engineering, measurement is the activity of obtaining and comparing physical quantities of realworld objects and events. This book envisages on the fundamentals and prospects of instrumentation and measurement.

Print ISBN: 9781682500774 | \$ 170 | Pub Year: 2016 | Hardcover

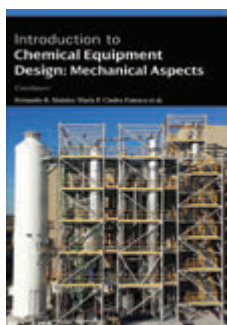


Irrigation Engineering & Hydraulic Structures

Contributors: Carlos Chávez, Carlos Fuentes et al.

Irrigation is the controlled application of water to croplands. Its primary objective is to create an optimal soil moisture regime for maximizing crop production and quality while at the same time minimizing the environmental degradation inherent in irrigation of agricultural lands. Besides minimizing the use of irrigation water by adopting canal linings, sprinkler irrigation and microirrigation techniques such as drip irrigation on a large scale, additional waters are still required to be stored for bringing additional cropped area under irrigation to increase our food and fibre production, to fulfill our growing demands for ever increasing population. The techniques are essential which are deployed for construction of an efficiently functioning irrigation system. This book deals with the analysis and design of irrigation systems which includes dams, barrage, canals, drains, etc.

Print ISBN: 9781682500767 | \$ 170 | Pub Year: 2016 | Hardcover

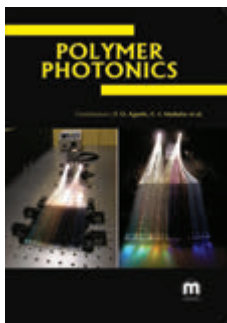


Introduction to Chemical Equipment Design: Mechanical Aspects

Contributors: Fernando B. Mainier, Maria P. Cindra Fonseca et al.

This book focuses on design aspects of chemical Equipment. Chemical Equipment Design is a guide to the selection and design of a wide range of chemical process equipment. Emphasis is placed on specific information concerning the process design and performance of equipment. This book conveys information on the selection, sizing and operation of process equipment in a format that assists quick and accurate decision making on standard process and equipment choices, time saving, improving productivity, and building understanding.

Print ISBN: 9781682500781 | \$ 170 | Pub Year: 2016 | Hardcover

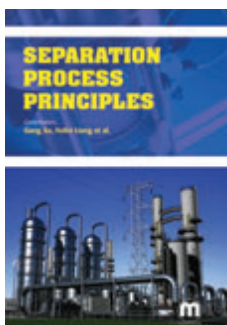


Polymer Photonics

Contributors: F. O. Aguele, C. I. Madufor et al.

Polymers are important materials for photonic applications; some examples are plastic optical components such as Fresnel lenses, light pipes, diffusers, and polarizers. Photonic crystals are a new class of periodic dielectric media that can provide novel ways to manipulate and control light. This book reviews on up-to-date activities in various fields of photonic polymers including their promising applications.

Print ISBN: 9781682502334 | \$ 170 | Pub Year: 2016 | Hardcover



Separation Process Principles

Contributors: Gang Xu, Feifei Liang, et al.

Separation is a method to achieve any mass transfer phenomenon that converts a mixture of substances into two or more distinct product mixtures, at least one of which is enriched in one or more of the mixture's constituents. In some cases, a separation may fully divide the mixture into its pure constituents. Separations are carried out based on differences in chemical properties or physical properties such as size, shape, mass, density, or chemical affinity, between the constituents of a mixture. The separation can be done on a small scale, effectively a laboratory scale for analytical or preparative purposes, or on a large scale, effectively an industrial scale for preparative purposes, or on some intermediate scale. This book presents comprehensive and up-to-date treatment of the major separation operations in the chemical industry.

Print ISBN: 9781682500798 | \$ 170 | Pub Year: 2016 | Hardcover

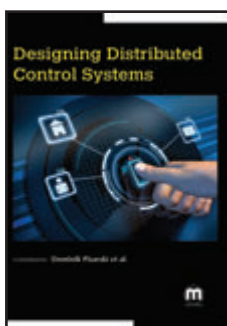


Green Communications

Contributors: Aditi Mishra, Neeraj Kumar Tiwari et al.

Green communications is provided along with different metrics that can be used to quantify energy efficiency for the various aspects of wireless infrastructure and also it has been marketed as a solution to addressing the growing cost and environmental impact of telecommunications. The book green communication focuses on the less radiation, less power consumption and enabling technology for less power consumption in other communication systems.

Print ISBN: 9781682502358 | \$ 160 | Pub Year: 2016 | Hardcover



Designing Distributed Control Systems

Contributors: Dominik Pisarski et al.

A distributed control system (DCS) is an automated control system that monitors and provides instructions to different parts of a machine. Commonly used in manufacturing equipment, a DCS utilizes input and output protocols to control distributed equipment. DCS systems are commonly used in process industries controlling breweries, refineries, chemical plants, paper mills, etc. The key advantage of DCSs is that they divide up the control tasks among multiple distributed systems. This book outlines for designing distributed machine control system software architecture.

Print ISBN: 9781682502303 | \$ 170 | Pub Year: 2016 | Hardcover

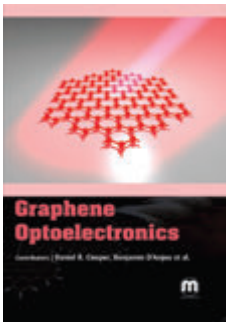


The Physics of Modern Devices

Contributors: Ling-Feng Mao, Huansheng Ning et al.

In physics, it is often needed to understand the basic concepts and limitations behind various technologies, which can be obtained from understanding the physics of modern devices. Exploring the physical principles underlying a number of modern devices and future devices, this book boosts understanding and appreciation of modern device physics from all angles.

Print ISBN: 9781682502310 | \$ 170 | Pub Year: 2016 | Hardcover



Graphene Optoelectronics

Contributors: Daniel R. Cooper, Benjamin D'Anjou et al.

Graphene is a term for a special structure or allotrope of carbon atoms where they self-assemble themselves into double-bonded six carbon atom rings in two dimensional sheets. Graphene optoelectronics devices is one of the most promising fields being researched, because the material could improve the efficiency of light emitting diode (LED) panels used in everything from computer and television screens to light sensors. This book gives an up-to-date account of the many opportunities graphene offers high-end optoelectronics and also focuses on potential as well as already realized applications, discussing metallic and passive components, such as transparent conductors and smart windows.

Print ISBN: 9781682502365 | \$ 180 | Pub Year: 2016 | Hardcover



Sustainable Aquaculture: Techniques

Contributors: Gulnihal Ozbay, Grant Blank et al.

Aquaculture is currently playing, and will continue to play, a big part in boosting global fish production and in meeting rising demand for fishery products. Aquaculture, in common with all other food production practices, is facing challenges for sustainable development. Most aqua-farmers, like their terrestrial counterparts, are continuously pursuing ways and means of improving their production practices, to make them more efficient and cost-effective. The promotion of sustainable aquaculture development requires that enabling environments, in particular those aimed at ensuring continuing human resource development and capacity building, are created and maintained. This book presents some innovative developments in sustainable aquaculture practices in the context of environmental protection and seafood production techniques.

Print ISBN: 9781682502648 | \$ 170 | Pub Year: 2016 | Hardcover

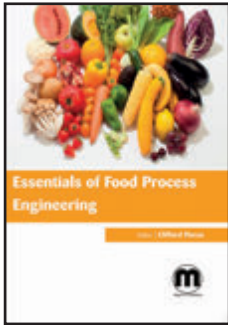


Recent Advances in Fish Farms

Contributors: Abdelraouf Ramadan Eid, Essam Mohamed Hoballah et al.

Fish farming or pisciculture is the principal form of aquaculture, while other methods may fall under mariculture. Fish farming involves raising fish commercially in tanks or enclosures, usually for food. The world keeps changing. There are always risks associated with change. To make careful risk assessment it is always needed to re-evaluate the information according to new findings in research. Scientific knowledge is essential in determining the strategy for fish farming. This book is one of the indispensable tools drawing information on recent advances in fish farming.

Print ISBN: 9781682502747 | \$ 170 | Pub Year: 2016 | Hardcover



Essentials of Food Process Engineering

Editor: Clifford Flores

Food engineering is a multidisciplinary field of applied physical sciences which combines science, microbiology, and engineering education for food and related industries. Food engineering encompasses a wide range of activities. Food engineers are employed in food processing, food machinery, packaging, ingredient manufacturing, instrumentation, and control. This book covers the important topics which are extensively used in food process industry. The book also focuses on challenges to employ modern tools, technology, and knowledge in food processing.

Print ISBN: 9781682500545 | \$ 170 | Pub Year: 2016 | Hardcover

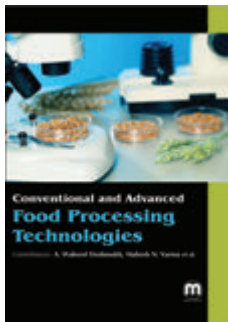


Food Engineering: Structure and Function

Contributors: Gary M. Booth, Tory L. Parker et al.

The book reveals of developing food engineering based on well-established principles, the benefits of developing the field by bringing together experts from industry, development, and applications of food engineering principles. Food engineers are responsible for the technological knowledge transfer important to the cost-effective production and promoting of food products and services.

Print ISBN: 9781682502693 | \$ 170 | Pub Year: 2016 | Hardcover



Conventional and Advanced Food Processing Technologies

Contributors: A. Waheed Deshmukh, Mahesh N. Varma et al.

Food processing and technology includes a set of physical, chemical or microbiological methods and techniques used to transmute raw ingredients into food and its transformation into other forms in food processing industry. It is the transformation of raw ingredients, by physical or chemical means into food, or of food into other forms. This book introduces a range of conventional and advance processing techniques that are used in food processing and also in manufacturing.

Print ISBN: 9781682502235 | \$ 180 | Pub Year: 2016 | Hardcover



Food Safety for the 21st Century: UV Applications for Food and Non-Food Surfaces

Editor: William M

The global importance of food safety is not fully appreciated by many public health authorities despite a constant increase in the prevalence of foodborne illness. This book reviews the status and scope of ultraviolet (UV) light technology in food processing industry for control of foodborne pathogens and spoilage organisms for food safety and shelf life extension. Research studies and commercial applications that utilize UV treatment for solid and liquid foods are dealt with. Also, the benefits and drawbacks of such methodologies were discussed, too.

Print ISBN: 978-1-68250-530-4 | \$155 | 2019 | Hardcover

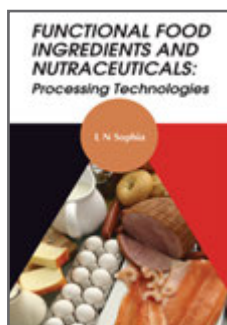


Reduced-Additive Foods: Technological Perspectives

Editor: Bijan Shirdel

Food additives are not a new invention. Since early times, there has been a need to preserve food from one harvest to another and to improve the presentation and nutritional value of food. This book provides an authoritative survey of current developments in regulation, research, and best practices in the management of chemicals in food. The book also addresses functional food product development from a number of perspectives: the process itself; health research that may provide opportunities; idea creation; regulation; and processes and ingredients.

Print ISBN: 978-1-68250-531-1 | \$155 | 2019 | Hardcover

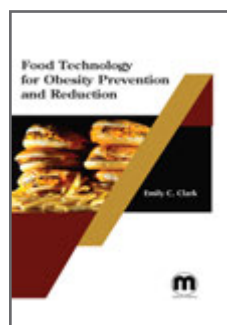


FUNCTIONAL FOOD INGREDIENTS AND NUTRACEUTICALS: Processing Technologies

Editor: L N Sophia

Functional foods are receiving a lot of interest today as food scientists and consumers realize the many health benefits of certain foods. Covering new and innovative technologies for the processing of functional foods and nutraceuticals, this book also focuses on challenges and opportunities, motivating the development and regulations of functional foods and nutraceuticals. A valuable tool for students, researchers and scientists working in food ingredients, food product research and development, functional foods and nutraceuticals.

Print ISBN: 978-1-68250-532-8 | \$155 | 2019 | Hardcover

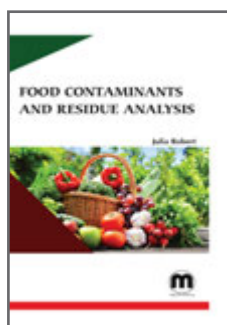


Food Technology for Obesity Prevention and Reduction

Editor: Emily C. Clark

Focusing on aetiological factors in the development of weight gain and obesity, this book is intended to propose related population nutrient goals and content areas for food-based dietary guidelines, and to evaluate some of the potential food and diet related intervention strategies that might help to attenuate and eventually reverse this global epidemic. This book presents criteria for evaluating treatment programs for obesity and explores what these criteria mean to health care providers, program designers, researchers, and even overweight people seeking help.

Print ISBN: 978-1-68250-533-5 | \$155 | 2019 | Hardcover

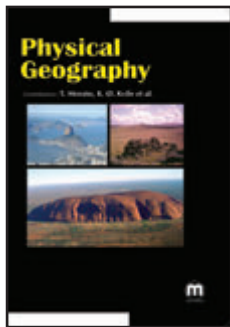


FOOD CONTAMINANTS AND RESIDUE ANALYSIS

Editor: Julia Robert

Food contamination is a matter of serious concern, as the high concentration of chemicals present in the edibles poses serious health risks. Protecting the public from the degrees of the harmfulness of contaminated foods has become a daunting task. Delivering state of the art information this book highlights the causes, types, and health implications of contamination in food. A valuable guide for all industrial and academic researchers involved with food safety, from industry professionals responsible for producing safe food, to chemical analysts involved in testing the final products.

Print ISBN: 978-1-68250-534-2 | \$150 | 2019 | Hardcover



Physical Geography

Contributors: T. Morato, K. Ø. Kvile et al.

The main purpose of this book is to explain the spatial characteristics of the various natural phenomena associated with the Earth's hydrosphere, biosphere, atmosphere, and lithosphere. Physical geography deals with the study of processes and patterns in the natural environment like the atmosphere, hydrosphere, biosphere, and geosphere, as opposed to the cultural or built environment, the domain of human geography. Physical Geography is a sub-discipline of two much larger fields of study - Geography and Earth Sciences.

Print ISBN: 9781682500873 | \$ 170 | Pub Year: 2016 | Hardcover



Soil Geography

Contributors: D. D. Eni, A. I. Iwara et al.

Soil Geography covers geographic methods to study the distribution of soils in relation to the factors influencing soil formation. Soil geography studies the pattern of distribution of soils on the earth's surface for the purpose of soil-geographic regionalization. There is general and regional soil geography. General soil geography studies the factors that influence soil formation and the most general laws of the geographic distribution of soils and types of soil structure. Regional soil geography is concerned with regionalization and with the description of the soils in individual regions.

Print ISBN: 9781682500880 | \$ 170 | Pub Year: 2016 | Hardcover

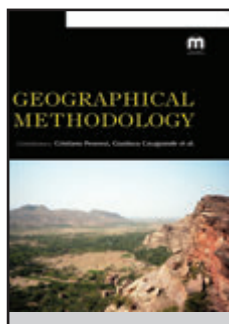


Paleoclimatology

Contributors: Patrick D. Danley, Martin Husemann et al.

Paleoclimatology is the study of past climates. Since it is not possible to go back in time to see what climates were like, scientists use imprints created during past climate, known as proxies, to interpret paleoclimate. Organisms, such as diatoms, foams, and coral serve as useful climate proxies. Paleoclimatology data are derived from natural sources such as tree rings, ice cores, corals, and ocean and lake sediments.

Print ISBN: 9781682500972 | \$ 170 | Pub Year: 2016 | Hardcover

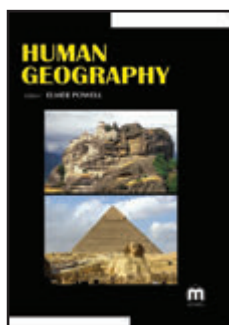


Geographical Methodology

Contributors: Cristiano Pesaresi, Gianluca Casagrande et al.

Geography is a field study of the lands, the features, the inhabitants, and the phenomena of earth. Nonetheless, modern geography is an all-encompassing discipline that foremost seeks to understand the earth and all of its human and natural complexities—not merely where objects are, but how they have changed and come to be. Geography has been called the world discipline and the bridge between the human and the physical science. Different methodological positions exist within geographical work, mainly related to the two main branches of the field, physical and human. This book offers a conceptual and practical introduction to research methodology, data collection, and techniques used in both human and physical geography.

Print ISBN: 9781682500989 | \$ 160 | Pub Year: 2016 | Hardcover

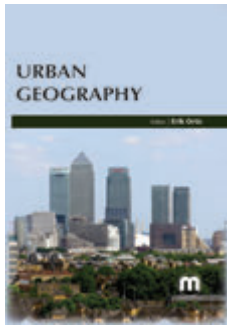


Human Geography

Editor: Elmer Powell

Human geography, deals with world, its people and their communities, cultures, economies and relations with the environment by highlighting their relations with and across space and place. This book envisages the systematic study of patterns and processes that have shaped human understanding, use, and alteration of earth's surface.

Print ISBN: 9781682500903 | \$ 170 | Pub Year: 2016 | Hardcover

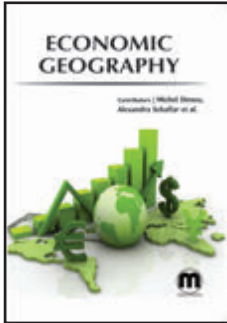


Urban Geography

Editor: Erik Ortiz

Urban geography, with reference to their geographical environment, is related to the study of urban places. Approximately, the focus consist of origin of towns, their growth and development, their functions in and nearby their surroundings. Urban geography studies the effect of urban processes on the earth's surface's social and physical structures.

Print ISBN: 9781682500934 | \$ 170 | Pub Year: 2016 | Hardcover

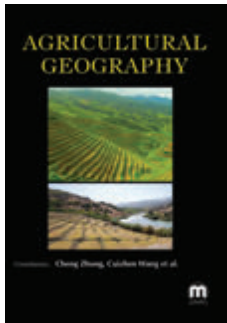


Economic Geography

Contributors: Michel Dimou, Alexandra Schaffar et al.

Economic geography is the study of the location, distribution and spatial organization of economic activities across the world. It represents a traditional subfield of the discipline of geography. However, in recent decades, many economists have also approached the field in ways more typical of the discipline of economics. Economic geography has taken numerous approaches to various dissimilar subject matters, as well as economies of agglomeration, transportation, international trade, development, real estate, gentrification, and globalization. This book gives an understanding of the geographic nature of economic systems and global economic change.

Print ISBN: 9781682500910 | \$ 170 | Pub Year: 2016 | Hardcover

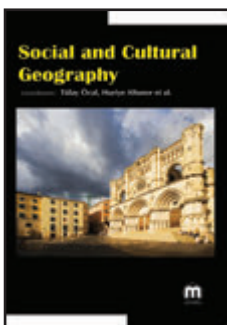


Agricultural Geography

Contributors: Cheng Zhong, Cuizhen Wang et al.

Agricultural Geography focuses on structures of agricultural landscapes and the processes that lead to these spatial patterns. Agricultural geography is a subdiscipline of human geography. It is traditionally considered the branch of economic geography that investigates those parts of the Earth's surface that are transformed by humans through primary sector activities. What distinguishes the territorial distribution of agriculture from that of industry is the special nature of the relations between agricultural production and the natural environment, that is, the fact that land in this case is a means of production. The territorial distribution of agriculture obeys a variety of laws characteristic of the social and economic structure within which it is practiced.

Print ISBN: 9781682500941 | \$ 170 | Pub Year: 2016 | Hardcover

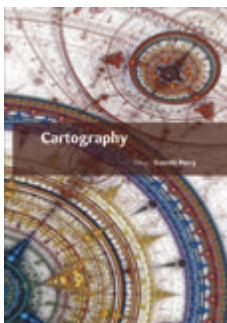


Social and Cultural Geography

Contributors: Tülay Öcal, Huriye Altuner et al.

Social geography is the branch of human geography that is most closely related to social theory in general and sociology in particular, dealing with the relation of social phenomena and its spatial components. In cultural geography, we study about cultural products and norms and their disparities and relations to spaces and places. Social and Cultural Geography emphasizes on the topics with the spatialities of society and culture, particularly the role of space, place and culture in relation to social issues, cultural politics, aspects of daily life, cultural commodities, consumption, identity and community, and historical legacies.

Print ISBN: 9781682500927 | \$ 160 | Pub Year: 2016 | Hardcover

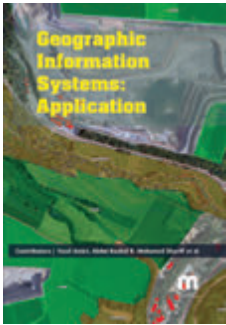


Cartography

Editor: Everett Perry

Modern cartography, mostly integrated with geographic information science, organizes many theoretical and practical fundamentals of geographic information systems. In cartography, technology has continually changed in order to meet the demands of new generations of mapmakers and map users. The creation of more accurate maps and the ability to store and manipulate them digitally has evolved with the advent of magnetic devices. This book details the fundamentals and recent advances in cartography.

Print ISBN: 9781682500965 | \$ 170 | Pub Year: 2016 | Hardcover

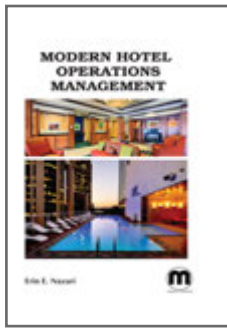


Geographic Information Systems: Application

Contributors: Fazel Amiri, Abdul Rashid B. Mohamed Shariff et al.

The importance of Geographic Information Systems (GIS) can hardly be overemphasized in today's academic and professional arena. More professionals and academics have been using GIS than ever – urban & regional planners, civil engineers, geographers, spatial economists, sociologists, environmental scientists, criminal justice professionals, political scientists, and alike. The book is a blend of the theories of GIS and their practical implementations in different conditions.

Print ISBN: 9781682502617 | \$ 170 | Pub Year: 2016 | Hardcover

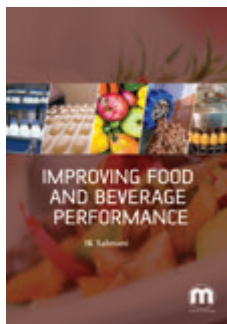


Modern Hotel Operations Management

Editor: Erin E. Nazari

Tourism and hospitality are social phenomena, and the industries associated with them are largely application oriented. Researchers in this field have conducted, and will continue to conduct, research that generates innovative knowledge that will benefit these industries and ultimately society. Covering the latest issues affecting the industry, this book gives up-to-date, dynamic information to students, researchers and professionals dealing with the area of hospitality industry.

Print ISBN: 978-1-68250-535-9 | \$145 | 2019 | Hardcover



Improving Food and Beverage Performance

Editor: IK Salmani

The provision of food and beverages away from home forms a substantial part of the activities of the hospitality industry and, indeed, of the economy as a whole. This book covers state of the art information in operations and management principles and procedures involved in an effective food and beverage control are conveyed in this book. This book provides students and researchers of issues in food and beverage management addressing a variety of managerial dilemmas of a more complex nature such as how important is the meal experience.

Print ISBN: 978-1-68250-536-6 | \$150 | 2019 | Hardcover

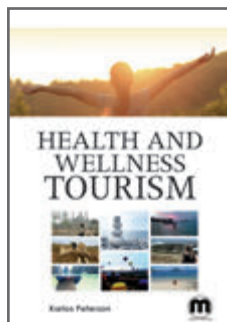


Food Safety in the Hospitality Industry

Editor: R Martin

Food safety, however, has become a major concern to the food industry given that the consumption of contaminated food and water contributes to a myriad of health problems the world over. Although food prepared and served at the restaurants may look clean and taste delicious, it may have been contaminated by biological, chemical or physical hazards during the preparation procedures from the source through to service. Food safety practices are addressed from various perspectives, together with management metrics to facilitate its implementation.

Print ISBN: 978-1-68250-537-3 | \$150 | 2019 | Hardcover

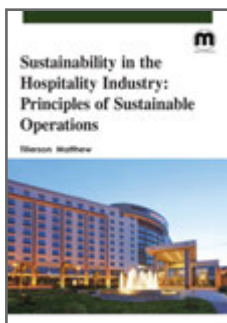


Health and Wellness Tourism

Editor: Karlos Peterson

Healthy and happy life is the top news and people are more eager to spend for maintaining their wellness and sickness prevention. This book aims to synthesize the key trends, developments, and challenges emerging with the growth of medical tourism and wellness tourism, and to present a number of considerations and recommendations for the spa industry to take full advantage of medical tourism and wellness tourism opportunities moving forward. This book aims to contribute to the literature and aid in developing a theoretical and practical framework in the area of health and wellness tourism.

Print ISBN: 978-1-68250-538-0 | \$145 | 2019 | Hardcover

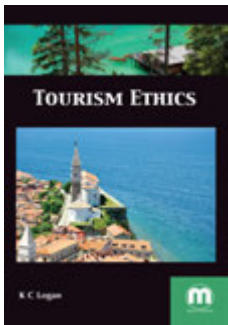


Sustainability in the Hospitality Industry: Principles of Sustainable Operations

Editor: Tillerson Matthew

Over the last decades, there has been an increase in the awareness of sustainability concerns amongst hoteliers and investors. It is, therefore, important to examine how this subject has been addressed by the academia. In this sense, this book is intended to mapping the theme of sustainability management in hotels, according to the delimitations set by researchers. An essential reading for students, researches and academics interested in the possibilities of sustainable forms of tourism and tourism's contribution to sustainable development.

Print ISBN: 978-1-68250-539-7 | \$150 | 2019 | Hardcover



Tourism Ethics

Editor: K C Logan

Tourism is one of the biggest industries in the world, but it faces a lot of issues with the ethics of the operations in this industry. This book introduces the important topic of tourism ethics and illustrates how ethical principles and theory can be applied to address contemporary tourism industry issues. The book offers insight into important trends and suggests strategies for policy makers involved in the travel and tourism industry.

Print ISBN: 978-1-68250-540-3 | \$145 | 2019 | Hardcover

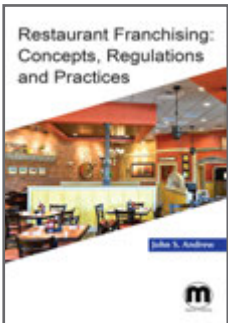


Hospitality Industry: Dynamics and Future Trends

Editor: Eric Joshua

Today's hospitality industry has become one of the most important factors in gross domestic product (GDP) contribution worldwide. It plays a significant role in socio-economic development of a country. The book focuses on key aspects of the hospitality management, research and practice bringing together leading scholars throughout the world. Presents a critical view of the management theory and the traditional theories, looking at how appropriate they are in hospitality and tourism and in a multicultural context.

Print ISBN: 978-1-68250-541-0 | \$150 | 2019 | Hardcover



Restaurant Franchising: Concepts, Regulations and Practices

Editor: John S. Andrew

Franchising is the most significant part in the hospitality industry through hotels and fast food restaurant. This book is intended to explain what characteristics of restaurant firms relate to franchising. The book answers major franchising questions as it explores the franchiser-franchisee relationship using a unique perspective. Real-world cases throughout add practical knowledge and industry insights as well.

Print ISBN: 978-1-68250-542-7 | \$150 | 2019 | Hardcover



Strategic Hospitality Management

Editor: Annie Simons

Hospitality is the act of kindness in welcoming and looking after the basic needs of customers or strangers, mainly in relation to food, drink, and accommodation. This work reveals the positive contribution that an integrated strategic management process can make to the effective management of a hospitality organization. The book equips students, researchers, and managers of the hospitality and tourism industry—with an advanced and contemporary knowledge of strategic management. Definitely, it helps students to develop the analytical and practical managerial skills they will need to do their jobs professionally and efficiently.

Print ISBN: 978-1-68250-474-1 | \$145 | 2018 | Hardcover



Tourism and Developments: Issues and Challenges

Editor: Jing Lu

Tourism is considered as one of the largest industries reference to volume of the business and employment generation globally. This compilation explores the relation between tourism and development and covers an array of diverse issues in a contemporary economic, socio-cultural and political context. It delivers inclusive insights into the trends affecting tourism development. This book is devoted to give the reader some insights into new paradigms, new issues, and old problems that are affecting our understanding of the global tourism system.

Print ISBN: 978-1-68250-475-8 | \$150 | 2018 | Hardcover

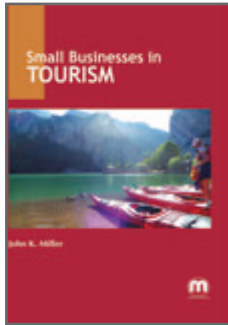


The Future of Tourism

Editor: I. S. Kerry

A key element of a successful tourism industry is the ability to recognize and deal with change across a wide range of key factors and the way they interact. Key drivers of global change within the external environment can be classified as Economic, Political, Environmental, Technological, Demographic and Social. This work not only pronounces the tourism, its historical perspective but it gives focus to consumer preference and the strategies to attract new customers and make the tourism more viable.

Print ISBN: 978-1-68250-476-5 | \$150 | 2018 | Hardcover

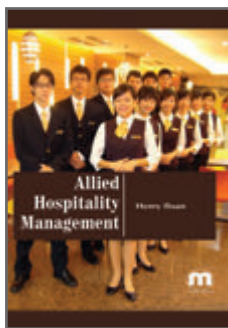


Small Businesses In Tourism

Editor: John K. Miller

This book is intended to identify the factors that play a significant role on the growth of small and micro tourism businesses and the barriers of growth. Growth barriers and their solutions are also discussed. It provides a conceptual framework relative to small, urban tourism business performance, which is used as an analytical framework to guide the interpretation of qualitative research undertaken with small business.

Print ISBN: 978-1-68250-477-2 | \$145 | 2018 | Hardcover



Allied Hospitality Management

Editor: Henry Ibsan

Hospitality refers to the relationship between a guest and a host, wherein the host receives the guest with goodwill, including the reception and entertainment of guests, visitors, or strangers. This book develops a critical view of the management theory and the traditional theories, looking at how appropriate they are in hospitality and tourism and in a multicultural context. Highly practical in approach, this is an up-to-date and skilful integration of all core areas of management. This is an invaluable guide for hotel employers, managers, consultants, students, and research scholars of tourism and hotel catering.

Print ISBN: 978-1-68250-335-5 | \$140 | 2017 | Hardcover

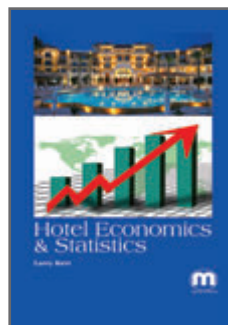


Financial Management in Hotels

Editor: M. Scott Millar

Sound financial management is at the core of any successful business. Of course, having a product or service in high demand, priced attractively for the target market, and delivered in an efficient, customer centric manner doesn't hurt either. But, even with all of the right market demographics, there is no guarantee of success. By following basic accounting principles, hotel owners and managers have the information they need to identify trends before they can have a negative impact on the business. They can reduce expenses, readily accommodate anticipated peak business times, and scale back operations during slow periods. The keys to financial success include an annual budget, detailed financial tracking model, ongoing audits, and reporting structure that keep profit and loss information at the manager's fingertips. Financial success is also driven by accountability, making employees and managers responsible for achieving financial goals in their respective functional area. The book explores theoretical financial concepts relevant to the hospitality organizations. This book is particularly useful for all those who are practicing cost and financial management hospitality accounting, both academically and professionally.

Print ISBN: 978-1-68250-336-2 | \$140 | 2017 | Hardcover



Hotel Economics & Statistics

Editor: Larry Kerr

This book provides an understanding of how to apply the methodology of statistics to real world situations in hotel industry. Economics is the study of the production and consumption of goods and the transfer of wealth to produce and obtain those goods. Economics explains how people interact within markets to get what they want or accomplish certain goals. Since economics is a driving force of human interaction, studying it often reveals why people and governments behave in particular ways.

Print ISBN: 978-1-68250-337-9 | \$140 | 2017 | Hardcover



Entrepreneurship Management in Hospitality Industry

Editor: Piter Arnold

The hospitality industry has undergone unrestrained changes in the last several years. Competitive pressures, shifting consumer preferences and consumption patterns, technological advances, consolidation, price discounting, and new distribution channels are but a few of the changes in the business landscape. Innovation has been championed as a way to cope with these and other changes in the industry. But what exactly is innovation, how has it functioned in the hospitality industry and what are the key ideas to help foster innovation? This book aims to explore hospitality innovation and the related area of entrepreneurship.

Print ISBN: 978-1-68250-338-6 | \$140 | 2017 | Hardcover



Restaurant Planning and Design

Editor: Jack Lawson

A restaurant is a living, breathing space with a distinct personality, concept, and cuisine philosophy. There are countless factors involved in successful design—a great architect, interior designer, and space—the most important is an understanding of the restaurant’s vision. The methodologies and approaches to restaurant design are as varied as the restaurant concepts in existence today. The overall process of restaurant design, remodeling, planning, etc. is often referred to as the discipline of “restaurant concept development”. This book provides you with the specific information and in-depth guidance one need to navigate the restaurant development process effectively.

Print ISBN: 978-1-68250-340-9 | \$140 | 2017 | Hardcover



Hotel Design, Planning, and Development

Editor: H. Baker

Hotel design involves the planning, drafting, design and development of hotels. The concept of hotel design is rooted in traditions of hospitality to travelers dating back to ancient times, and the development of many diverse types of hotels has occurred in many cultures. Hotel Design, Planning, and Development is a thorough overview of the important and fast-growing hospitality industry.

Print ISBN: 978-1-68250-339-3 | \$140 | 2017 | Hardcover

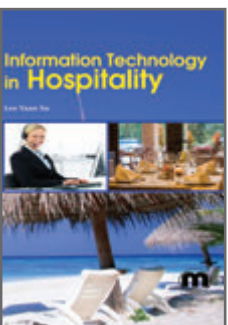


Hotel Administration

Editor: Larry Wodak

A hotel is an establishment that provides lodging paid on a short-term basis. Facilities provided may range from a modest-quality mattress in a small room to large suites with bigger, higher-quality beds, a dresser, a fridge and other kitchen facilities, upholstered chairs, a flatscreen television and en-suite bathrooms. Administration is the management of an office, business, or organization. Hotel Administration involves the efficient organization of people, information, and other resources to achieve hotel objectives. The book focuses on key aspects of the hotel administration, research, and practice bringing together leading scholars throughout the world.

Print ISBN: 978-1-68250-341-6 | \$140 | 2017 | Hardcover

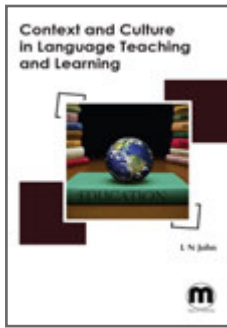


Information Technology in Hospitality

Editor: Lee Yaan su

Information technology (IT) has had profound impacts on both the capabilities of organizations in the hospitality industry and on how consumers select their hospitality services. By applying appropriate IT solutions, service providers are able to go beyond the practices they pursued in prior years, many of which have focused on distribution at any price. This allows hotels to craft value propositions and hospitality service opportunities for customers that exploit new opportunities to delight them and meet their unique needs. Information systems form a fascinating and rapidly expanding field of study. Hospitality traditionally lags other sectors in adopting information technology but this has changed in recent years. The intent of this book is to serve as a medium through which both researchers and the hospitality industry may display and exchange ideas and develop the corpus of knowledge.

Print ISBN: 978-1-68250-342-3 | \$140 | 2017 | Hardcover



Context and Culture in Language Teaching and Learning

Editor: L N John

This book illustrates how arguments of language teaching experts in favor of a culture class in language learning and teaching. The chapters in this book all address the significance of the relationship between the aims and methods of language teaching and the contexts in which it takes place. This book offers an account of what teachers are thinking, feeling and doing as they enact an intercultural perspective on language teaching and learning. The book offers trainee and practicing teachers, as well as researchers and graduate students, a ready point of access to the wealth of insight and experience accumulated by the authors over a decade of research.

Print ISBN: 978-1-68250-543-4 | \$150 | 2019 | Hardcover

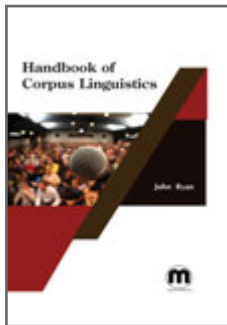


Experimental Research Methods in Sociolinguistics

Editor: Jonathan David

Portraying foundation issues, recent advances and current debates, presenting familiar or classic information in new ways and supplementing the familiar with fresh examples from a wide range of languages and social settings, this book clearly explains the patterns and systems that underlie language variation in use, as well as the ways in which alternations between different language varieties index personal style, social power and national identity. The book provides an up-to-date overview of sociolinguistics, reflecting changes in the global situation and the continuing evolution of the field and its relevance to language.

Print ISBN: 978-1-68250-544-1 | \$145 | 2019 | Hardcover

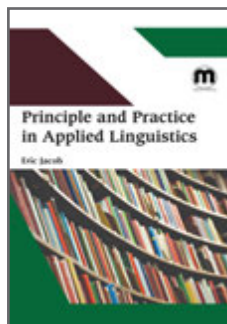


Handbook of Corpus Linguistics

Editor: John Ryan

At present, scientists across the world have been engaged in computerizing information of various types, since the primary goals of computational linguistics are to characterize, as far as possible, the features of a natural language within the frame of computer architecture. This book discusses the resources and methodologies used by corpus linguists; and show some key observations relating to comparative frequency and to patterning. It also considers the importance of corpus linguistics for linguistic theory and presents some of the applications of corpus research.

Print ISBN: 978-1-68250-545-8 | \$155 | 2019 | Hardcover



Principle and Practice in Applied Linguistics

Editor: Eric Jacob

Linguistics nowadays plays a minimal role in applied linguistics whether in terms of current linguistic theories or descriptive tools. Linguistic theories of the past twenty years are barely mentioned by applied linguists. Providing a wide-ranging treatment of the major issues in applied linguistics, this book explores implications for applied linguistics of recent developments in technologies used in second language teaching and assessment, language analysis, and language use.

Print ISBN: 978-1-68250-546-5 | \$145 | 2019 | Hardcover

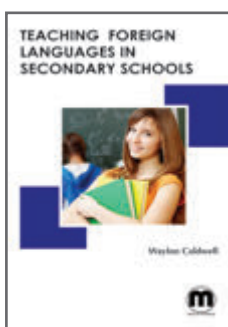


Teaching Foreign Languages in the Primary School

Editor: Madeleine Nicholas

Research into primary school English teaching and teacher training are urgently needed to ensure a better understanding so as to better inform and improve practice. This book focuses specifically on the development of design and teaching competences for pre-service and in-service EFL teachers in primary school which is considered as an essential aspect of the professionalism of teachers. In this book, the main FLT methods have considered still in use at schools and presented the theory of language and learning underlying them, their main features, activities and techniques, their foundation and decline, as well as a general assessment of all of them.

Print ISBN: 978-1-68250-547-2 | \$150 | 2019 | Hardcover

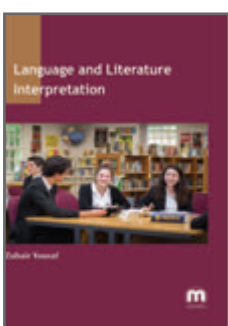


Teaching Foreign Languages in Secondary Schools

Editor: Waylon Caldwell

Study of another language allows the individual to communicate effectively and creatively and to participate in real-life situations through the language of the authentic culture itself. This book focuses on research that characterizes the most common interests of academics and practitioners in foreign language teaching and teachers, foreign language learning and learners, foreign language teacher education, and the relationship between language and culture. This book examines research and issues related to the teaching of second and foreign languages at secondary level. The book focuses on the real world cases of teaching modern foreign languages.

Print ISBN: 978-1-68250-548-9 | \$150 | 2019 | Hardcover



Language and Literature Interpretation

Editor: Zubair Yousaf

Language is a means of conveying ideas to others. This can also to a certain extent be done by the use of gestures and signs. Literature has the capacity to incorporate within itself the entire universe of discourses. In fact the scope of literature is everything which can come into the human mind. It includes everything from Mathematics to Philosophy and to the other intricate sciences. This book intends to discuss the function of language and literature and the difference between language and literature. It also aims to discuss the purpose, aim, and benefit of studying literature.

Print ISBN: 978-1-68250-432-1 | \$150 | 2018 | Hardcover



English in Modern Times

Editor: Andrew D. Wright

The English language is considered to be the world language of today. It has an extensive amount of words not found in other languages and its rich vocabulary may sufficiently accommodate all the situations of a social and technical nature. This book focuses on the facts of language rather than on any of the various contemporary theoretical approaches to the study of those facts. The chapters deal with changes in vocabulary, syntax, and morphology and phonology and with the attempts of lexicographers, grammarians, and elocutionists to arrest and control these changes by codifying the language.

Print ISBN: 978-1-68250-433-8 | \$150 | 2018 | Hardcover

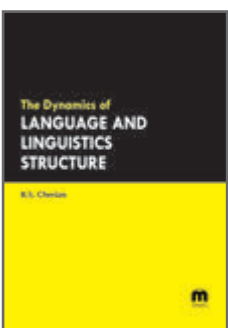


Modern English Structures

Editor: Juhani H. Taponen

Modern English has a large number of dialects spoken in diverse countries throughout the world. This book is intended for advanced graduate students and practitioners interested in contemporary English, especially those whose key area of interest is English as a second language, English stylistics, theoretical and applied linguistics. The book gives an introduction to English sounds, grammar, and vocabulary. It presents an analysis of the structure of English words and their classification as well as the classification of English words and their grammatical modification.

Print ISBN: 978-1-68250-434-5 | \$150 | 2018 | Hardcover



The Dynamics of Language and Linguistics Structure

Editor: R.S. Cherian

In everyday life, language also serves equally important social and emotional functions. Linguists are interested in models of how language is organized in the mind and how the social structures of human communities shape language, reflecting those structures in expression and interpretation. This work aims to examine the structural properties of language from the perception of language evolution and thereby, elucidate the emergence of certain universal characteristics of languages, and those which try to exploit the network based representations to develop certain useful practical systems such as machine translation, information retrieval and summarization systems.

Print ISBN: 978-1-68250-435-2 | \$150 | 2018 | Hardcover



New Methods in Applied Language

Editor: Byoung-Suk Cho

This book deals with the differences between approaches, methods and techniques, as well as the three major issues which are recurrent in FLT. The contributions are all by well-known experts in the area. More specifically, the work aims to give some comprehensive and updated coverage of theory, research and practice in two of the most challenging issues in today's English language teaching scenarios: the development of L2 vocabulary knowledge and the contribution of new corpus-based evidence to language teaching.

Print ISBN: 978-1-68250-437-6 | \$150 | 2018 | Hardcover

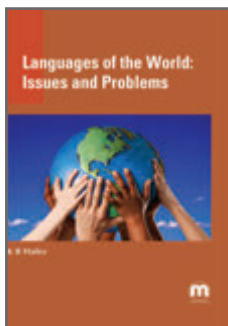


New Trends in Applied Language Learning

Editor: Albert S. Kim

This work focuses on the current trends in language learning methods. The text provides insights and approaches on instructional methods and techniques, curriculum and materials development, assessment of needs within the profession, testing and evaluation, and implications and applications of research from related fields such as linguistics, education, communications, psychology, and the social sciences. This book tries to analyze their effectiveness and weakness of several most influential learning approaches and methods. This comprehensive tool will be of interest to teachers and researchers in the field of language teaching/learning and applied linguistics.

Print ISBN: 978-1-68250-438-3 | \$150 | 2018 | Hardcover

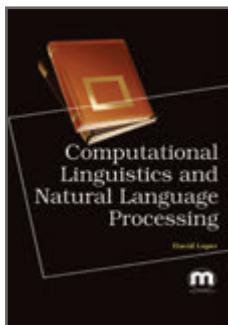


Languages of the World: Issues and Problems

Editor: K B Hafez

Language is a complex multifunctional phenomenon that links an individual to other individuals, to communities, and to national cultures. This literature deals with language policy, language management, and language use in international organizations, multinational enterprises, etc., and theoretical studies on global communication, language interaction, and language conflict. It is especially concerned with relationships between and among language communities, particularly in international contexts, and in the adaptation, manipulation, and standardization of language for international use

Print ISBN: 978-1-68250-443-7 | \$150 | 2018 | Hardcover

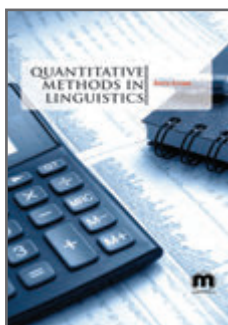


Computational Linguistics and Natural Language Processing

Editor: David Loper

Computational linguistics is an interdisciplinary field concerned with the statistical or rule-based modeling of natural language from a computational perspective. Traditionally, computational linguistics was usually performed by computer scientists who had specialized in the application of computers to the processing of a natural language. Computational linguists often work as members of interdisciplinary teams, including linguists, language experts, and computer scientists. This comprehensive book provides an overview of the concepts, methodologies, and applications in computational linguistics and natural language processing.

Print ISBN: 978-1-68250-362-1 | \$145 | 2017 | Hardcover



Quantitative Methods In Linguistics

Editor: Jerry Grant

Linguistics is the scientific study of language and its structure, including the study of grammar, syntax, and phonetics. Presenting a down-to-earth and readable introduction to quantitative research, this book is a useful how-to guide for students encountering quantitative data for the first time, or for postgraduates embarking on linguistic research projects. A comprehensive guide to conducting research projects in linguistics, this book provides a complete outline in state-of-the-art data collection, processing, and analysis techniques.

Print ISBN: 978-1-68250-364-5 | \$145 | 2017 | Hardcover



Structure of English Language

Editor: Jerry Thomas

The English language is the primary language of several countries including Australia, Canada, New Zealand, the United Kingdom, and the United States and a second language in a number of multilingual countries including India, Singapore, and the Philippines. This book provides an unfolding explanation of the linguistic patterns which govern our daily use of English. It also deals with the structure of English working from its smallest elements to its largest.

Print ISBN: 978-1-68250-367-6 | \$145 | 2017 | Hardcover

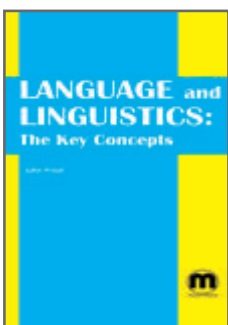


Speech and Language Technologies

Editor: H.G. Harper

Due to the recent availability of large bodies of text and speech in electronic form, data-based research of all kinds has increased dramatically in areas such as computational linguistics and language engineering, speech, humanities computing, psycho-linguistics, and information retrieval. This book is intended to explore the methodologies and technologies that are emerging as a result of this work. The book intended for use as teaching materials on undergraduate and postgraduate speech acoustics and experimental phonetics courses; also aimed at researchers from phonetics, linguistics, computer science, psychology and engineering.

Print ISBN: 978-1-68250-343-0 | \$145 | 2017 | Hardcover



Language and Linguistics: The Key Concepts

Editor: John Fried

Linguistics is concerned with the nature of language and communication. It deals both with the study of particular languages, and the search for general properties common to all languages or large groups of languages. It also includes explorations into the nature of language variation, language change over time, how language is processed and stored in the brain, and how it is acquired by young children. This book introduces the key concepts of linguistics and applies these concepts to real-world settings.

Print ISBN: 978-1-68250-344-7 | \$145 | 2017 | Hardcover

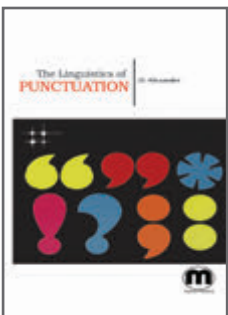


Language Program Evaluation: Theory and Practice

Editor: Lee Xie Que

Evaluation is a systematic process which involves gathering information and giving feedback on the way the program works so that improvements can be made in an ongoing way. Like assessment, evaluation can be formative and summative. Formative evaluation is the regular ongoing reflection on how the program is going while summative evaluation occurs at the end of a program and provides a perspective on the effectiveness of the program. As educators, we reflect constantly on our daily work, often in an instinctive manner. While this is useful, the process can be more effective when it is systematic, explicit and articulated to others. Language Program Evaluation provides teachers, researchers, and administrators with a complete introduction to both qualitative and quantitative approaches to evaluating the effectiveness of their programs.

Print ISBN: 978-1-68250-345-4 | \$145 | 2017 | Hardcover

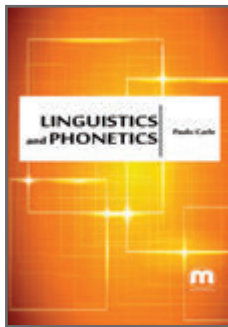


The Linguistics of Punctuation

Editor: D. Alexander

Punctuation marks are symbols that are used to aid the clarity and comprehension of written language. Some common punctuation marks are the period, comma, question mark, exclamation point, apostrophe, quotation mark and hyphen. Punctuation is not implemented sufficiently in linguistic theory. This has different causes. The Linguistics of Punctuation emphasis on many linguistic approaches of the past analyzed written language by reference to the spoken medium and dismissed writing itself as an object of theoretical interest.

Print ISBN: 978-1-68250-346-1 | \$145 | 2017 | Hardcover

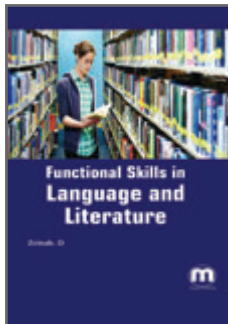


Linguistics and Phonetics

Editor: Paulo Carle

Phonetics deals with the production of speech sounds by humans, often without prior knowledge of the language being spoken. The study of the production and perception of speech sounds is a branch of linguistics called phonetics, studied by phoneticians. The study of how languages treat these sounds is called phonology. Linguistics and phonetics presents a new stance on the presentation of basic phonetic skills for students of linguistics, using examples drawn from a wide-range of languages.

Print ISBN: 978-1-68250-365-2 | \$145 | 2017 | Hardcover

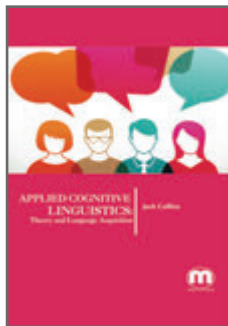


Functional Skills in Language and Literature

Editor: Zeinab. D

Language is the expression of ideas by means of speech-sounds combined into words. Words are combined into sentences, this combination answering to that of ideas into thoughts. The functions of language include communication, the expression of identity, play, imaginative expression, and emotional release. Literature is a form of human expression. It is written material such as poetry, novels, essays, etc., works of imagination characterized by excellence of style and expression and by themes of general or enduring interest. This book focuses on functional skills in language and literature.

Print ISBN: 978-1-68250-366-9 | \$145 | 2017 | Hardcover

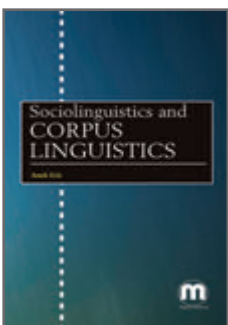


Applied Cognitive Linguistics: Theory and Language Acquisition

Editor: Jack Collins

Cognitive linguistics (CL) refers to the branch of linguistics that interprets language in terms of the concepts, sometimes universal, sometimes specific to a particular tongue, which underlie its forms. It is thus closely associated with semantics but is distinct from psycholinguistics, which draws upon empirical findings from cognitive psychology in order to explain the mental processes that underlie the acquisition, storage, production and understanding of speech and writing. This introductory book sketches the theoretical position of cognitive linguistics together with a number of practical features of the way in which research in cognitive linguistics is organized. The book deals with different conceptual phenomena that are recognized by cognitive linguistics.

Print ISBN: 978-1-68250-347-8 | \$145 | 2017 | Hardcover



Sociolinguistics and Corpus Linguistics

Editor: Anek Eric

Sociolinguistics is the descriptive study of the effect of any and all aspects of society, including cultural norms, expectations, and context, on the way language is used, and the effects of language use on society. Corpus linguistics is the analysis of naturally occurring language on the basis of computerized corpora. Usually, the analysis is performed with the help of the computer, i.e. with specialized software, and takes into account the frequency of the phenomena investigated. This book introduces students to the ways in which techniques from corpus linguistics can be used to aid sociolinguistic research. Corpus linguistics shares with variationist sociolinguistics a quantitative approach to the study of variation or differences between populations.

Print ISBN: 978-1-68250-348-5 | \$145 | 2017 | Hardcover

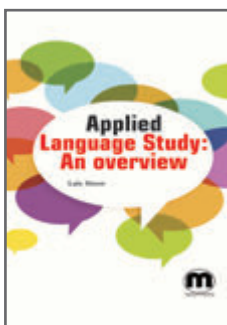


Contrastive Linguistics: Prospects and Problems

Editor: J.B. Butler

Contrastive linguistics is a practice-oriented linguistic approach that seeks to describe the differences and similarities between a pair of languages. Contrastive Linguistics, roughly defined as a subdiscipline of linguistics which is concerned with the comparison of two or more (subsystems of) languages, has long been associated primarily with language teaching. Apart from this applied aspect, however, it also has a strong theoretical purpose, contributing to our understanding of language typology and language universals. This book features the prospects and issues of contrastive linguistics.

Print ISBN: 978-1-68250-349-2 | \$145 | 2017 | Hardcover

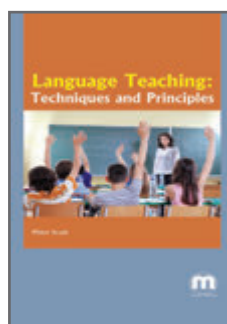


Applied Language Study: An overview

Editor: Luis Steen

Applied Language Studies (APPLS) combines the application of second language theories to the practice of learning, teaching, and assessing second languages. Integrating a wide range of perspectives, APPLS is an interdisciplinary field that focuses on the nature of language. APPLS encompasses a wide range of topics and concerns from theoretical perspectives on second language acquisition, to concepts of culture and identity in respect to language and learning, and methodologies for teaching and assessment. This book offers an array of analytical tools for undergraduate students of language, communication, and education, and provides an overview of the field for those interested in further study in linguistics and applied language studies.

Print ISBN: 978-1-68250-350-8 | \$145 | 2017 | Hardcover

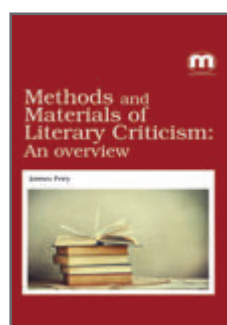


Language Teaching: Techniques and Principles

Editor: Pitter Scott

Good teaching happens when competent teachers with non-discouraging personalities use non-defensive approaches to language teaching and learning, and cherish their students. This book presents new ways of viewing and teaching second language acquisition (SLA) based on the latest research and methods. The book is an essential resource to new and experienced teachers worldwide.

Print ISBN: 978-1-68250-351-5 | \$145 | 2017 | Hardcover

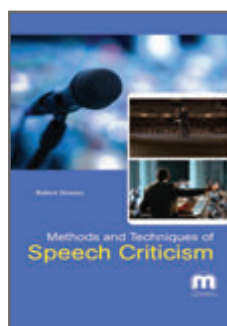


Methods and Materials of Literary Criticism: An overview

Editor: James Frey

Literary criticism is the evaluation, analysis, description, or interpretation of literary works. It is usually in the form of a critical essay, but in-depth book reviews can sometimes be considered literary criticism. Criticism may examine a particular literary work, or may look at an author's writings as a whole. Finding literary criticism can be challenging. The functions of literary criticism vary widely, ranging from the reviewing of books as they are published to systematic theoretical discussion.

Print ISBN: 978-1-68250-352-2 | \$145 | 2017 | Hardcover



Methods and Techniques of Speech Criticism

Editor: Robert Strasser

Rhetorical criticism analyzes the symbolic artifacts of discourse – the words, phrases, images, gestures, performances, texts, films, etc. that people use to communicate. Rhetorical analysis shows how the artifacts work, how well they work, and how the artifacts, as discourse, inform and instruct, entertain and arouse, and convince and persuade the audience; as such, discourse includes the possibility of morally improving the reader, the viewer, and the listener. Rhetorical criticism studies and analyzes the purpose of the words, sights, and sounds that are the symbolic artifacts used for communications among people. This book deals with rhetorical theory, advanced speech composition, and the history or philosophy of public address.

Print ISBN: 978-1-68250-353-9 | \$145 | 2017 | Hardcover



Approaches of Discourse Analysis

Editor: J.D Phillips

Discourse analysis is a term that has come to have different interpretations for scholars working in different disciplines. This book presents systematic introduction to discourse analysis as a body of theories and methods for social research. This book will be of great interest to students and researchers in linguistics, sociology, and psychology interested in interdisciplinary approaches to coping with topical social problems.

Print ISBN: 978-1-68250-354-6 | \$145 | 2017 | Hardcover



Language Learning: Experimental Research Methods

Editor: D.L David

This book aims to describe and explain language learning phenomena. Language learning researchers have adopted research methods that allow them to systematically examine issues in language learning. Systematic, rigorous research is needed if the growing field of language learning is to progress methodically. This book demonstrates and fully explains such a methodology. The book will not only be of use to advanced undergraduate and postgraduate students, but also to any scholars wishing to learn more about a particular research method.

Print ISBN: 978-1-68250-355-3 | \$145 | 2017 | Hardcover

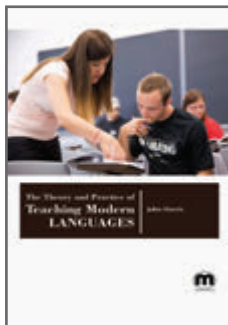


Strategies for Language Learning and Teaching

Editor: Hui Elana

In today's global society many learners are facing the challenge of accessing an International Baccalaureate (IB) program in a language other than their mother tongue. To enable learners to fully participate in both the academic and social aspects of school life, educators need to recognize how this phenomenon impacts on teaching and learning and identify ways to support language development. Language learning strategies refers to the processes and actions that are consciously deployed by language learners to help them to learn or use a language more effectively. This book presents the tools and techniques in the effective teaching and learning of languages.

Print ISBN: 978-1-68250-356-0 | \$145 | 2017 | Hardcover

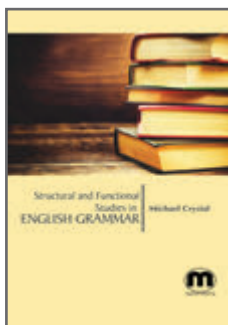


The Theory and Practice of Teaching Modern Languages

Editor: John Harris

A modern language is any human language that is currently in use. The term is used in language education to distinguish between languages which are used for day-to-day communication (such as French and German) and dead classical languages such as Latin, Sanskrit, and Classical Chinese, which are studied for their cultural or linguistic value. This book looks at the ways in which languages can be taught, and at the topics that highlight the practical methods that will help teachers get the best results. This text brings together research topics written by experts in the thriving field of language teacher education from a variety of geographical and institutional contexts.

Print ISBN: 978-1-68250-357-7 | \$145 | 2017 | Hardcover

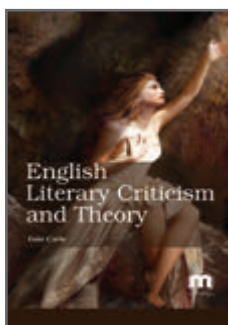


Structural and Functional Studies in English Grammar

Editor: Michael Crystal

English grammar is the structure of expressions in the English language. This includes the structure of words, phrases, clauses and sentences. There are historical, social, cultural and regional variations of English. Divergences from the grammar described here occur in some dialects of English. This book presents a number of studies in the lexico-grammar of English which focus on the one hand on close reading of language in context and on the other hand on current functional theoretical concerns.

Print ISBN: 978-1-68250-358-4 | \$145 | 2017 | Hardcover

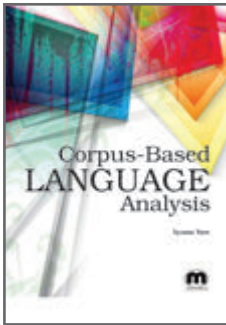


English Literary Criticism And Theory

Editor: Eoin Carle

English literature is hundreds of years old and continues to be one of the most popular courses of study in high schools and universities around the world. Learn about what defines English literature and a few of its greatest writers. English literature is the study of literature written in the English language. Literary criticism is the study, evaluation, and interpretation of literature. Modern literary criticism is often influenced by literary theory, which is the philosophical discussion of literature's goals and methods. Though the two activities are closely related, literary critics are not always, and have not always been, theorists. This incredibly useful book offers an introduction to the history of literary criticism and theory from ancient Greece to the present.

Print ISBN: 978-1-68250-359-1 | \$145 | 2017 | Hardcover



Corpus-Based Language Analysis

Editor: Lynne yen

An investigation into the way people use language in speech and writing, this book introduces the corpus-based approach. This book illustrates the kinds of analyses and perspectives on language use possible from both corpus-based and corpus-driven approaches. Corpus linguistics is the study of language as expressed in corpora (samples) of “real world” text. The text-corpus method is a digressive approach for deriving a set of abstract rules, from a text, for governing a natural language, and how that language relates to and with another language; originally derived manually, corpora now are automatically derived from the source texts. Corpus linguistics proposes that reliable language analysis is more feasible with corpora collected in the field, in their natural contexts, and with minimal experimental-interference.

Print ISBN: 978-1-68250-360-7 | \$145 | 2017 | Hardcover

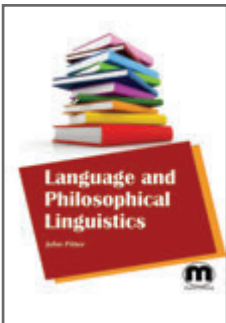


Translation and Linguistics

Editor: Sara Hatim

Translation is the communication of the meaning of a source-language text by means of an equivalent target-language text. Linguistics plays an important role in the translation of a document from one language to another. Translating information includes more than just changing each word from the original language to another. One must also decode and decipher all the facets and functions of the original language into the new language. This is where the study and understanding of linguistics comes into play in translation. This book takes a linguistic approach to translation issues, looking first at the structural view of language that explains the difficulty of translation. It also seeks to provide further insights into the way scientific and technical knowledge is communicated.

Print ISBN: 978-1-68250-361-4 | \$145 | 2017 | Hardcover



Language and Philosophical Linguistics

Editor: John Pitter

Language and Philosophical Linguistics brings together contributions by philosophers, logicians, and linguists, offering a variety of interdisciplinary approaches to crucial problems in the contemporary philosophy of language and linguistics. This book focuses on issues related to structure and meaning in natural language, as addressed in the semantics, philosophy of language, pragmatics, and related disciplines.

Print ISBN: 978-1-68250-363-8 | \$145 | 2017 | Hardcover

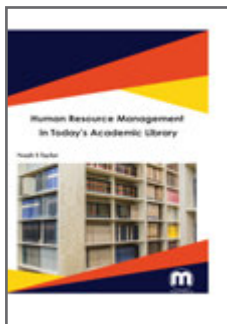


Document Management system: Principles, Techniques, and Applications

Editor: Lory James

This book looks at the substantial aspects of system integration and main problem questions of this process. It highlights some important issues, many of which are often overlooked. This work suggests how this can be achieved in the context of knowledge management and improvement approaches such as business process re-engineering, quality management and Investors in People. This book is envisioned to assistance potential users of electronic document management systems in determining the route to take in implementing a system.

Print ISBN: 978-1-68250-549-6 | \$150 | 2019 | Hardcover

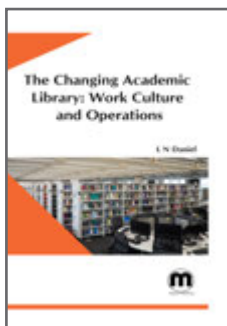


Human Resource Management in Today's Academic Library

Editor: Noah S Taylor

The dynamics and structure of the academic library within the higher education community create complex environments for the library administrator attempting to navigate the myriad rules and regulations that affect staff recruiting, hiring, processing, compensating, and related functions for library personnel. This book focuses on strategic human resource management techniques in a digital library environment which may help policy makers to identify ways in which they can motivate their employees, and policy planners to identify their staff's different requirements in digital library context. Several tasks, functions, and responsibilities are explored in greater depth.

Print ISBN: 978-1-68250-550-2 | \$150 | 2019 | Hardcover

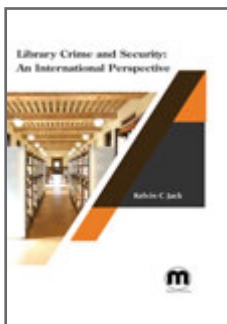


The Changing Academic Library: Work Culture and Operations

Editor: L N Daniel

The libraries of the 21st century are no longer simply familiar repositories for books. This book is intended to provide a critical overview of the issues and research and useful look at the library as a workplace and offers practical solutions that can be implemented to improve the work environment in an academic library. The special features of 21st century academic libraries like library softwares, retrospective conversion, and digital library initiative are also discussed.

Print ISBN: 978-1-68250-551-9 | \$145 | 2019 | Hardcover



Library Crime and Security: An International Perspective

Editor: Kelvin C Jack

Today, library environments are increasingly reliant on computer technology. Libraries have the main objectives of being entrusted with the selection, acquisition, organisation, storage and dissemination of information to their patrons. This book examines the literature on library security and collection security to identify factors to be considered to develop a collection security management assessment instrument for university libraries. This book is intended for all types of libraries – public, academic, corporate, and special libraries and collections.

Print ISBN: 978-1-68250-552-6 | \$145 | 2019 | Hardcover

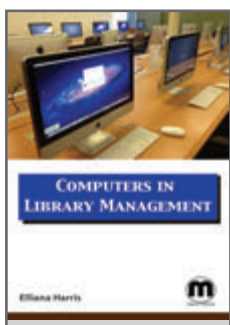


Preserving Digital Materials in libraries, Archives and Museums

Editor: Elia Martin

Digital Preservation has been recognized as one of the urgent challenges in our digital information society. It is the current trends in all modern libraries and a recognized as a vital part of managing information in digital format. To indicate interdisciplinary roads towards successful applications, the topics in this book explore the implication of digital Libraries, Archives and Museums from the perspectives of design, procedure, and advancement. This book discusses the current state of digital preservation policy planning within cultural heritage organizations.

Print ISBN: 978-1-68250-553-3 | \$150 | 2019 | Hardcover



Computers in Library Management

Editor: Elliana Harris

Now, in the 21st century, with the emergence of ICT & Web 2.0 technologies, libraries have a new, more dynamic role in knowledge society and as the individual is affected by ICT, in the same way, the individual can also influence the technology. Presenting state of the art on the role of IT utilities in the transformation of library services, this book identifies critical issues related to the utilization of digital technologies and digital material; their benefits and challenges faced by librarians and library users as well as their effective operation from academic libraries in this information age.

Print ISBN: 978-1-68250-554-0 | \$150 | 2019 | Hardcover



Qualitative and Quantitative Methods in Libraries: Theory & Practice

Editor: Natalja Silva

Library and information science has been evolving into a discipline in which the variety of research methods and approaches has been expanding. This book covers the importance of research methods in LIS as well as the significance LIS researchers have attached to research methods in their scholarly undertakings. Intended to serve the needs of scholars, students, library managers, information professionals, interdisciplinary faculty, teacher librarians, library media specialists, and teachers.

Print ISBN: 978-1-68250-555-7 | \$145 | 2019 | Hardcover

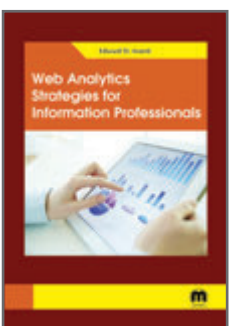


Rethinking Reference for Academic Libraries: Innovative Developments

Editor: Maria Lure

In this IT era, the role of the libraries and information centers has been changed drastically. They have to deal with all types of novel technology. Librarians have to be familiar with the new and universal trends in handling the information and providing prompt as well as accurate services. This book covers state of the art studies to discuss innovative developments and future trends of library reference services. A guide for professionals working in reference services in libraries covers such topics as relationships with paraprofessionals, new resources, references.

Print ISBN: 978-1-68250-556-4 | \$150 | 2019 | Hardcover

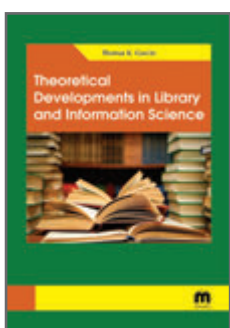


Web Analytics Strategies for Information Professionals

Editor: Edward D. Arnett

Libraries are delivering an ever-increasing proportion of their services through the web, a trend that seems certain to continue. The digital era has alleviated most space limitations and arguably removed the barriers to entry around publishing. These factors have given rise to the increase in number of electronic resources available to libraries, with financial rather than physical constraints being the primary limiting factor. This work is a comprehensive guide to web analytics tools, explaining what librarians need to know to implement them effectively.

Print ISBN: 978-1-68250-426-0 | \$145 | 2018 | Hardcover



Theoretical Developments in Library and Information Science

Editor: Thomas K. Garcin

Library and Information Science has been an emerging disciplines and being recognized worldwide as the library or learning resource centers which are one of the important components of any academic institutions like colleges, universities, & research institutions including other Institutions of higher learning. This book presents different facets or aspects of Library and Information Science (LIS) from a theoretical and philosophical perspective. It discusses the different labels for the discipline, its institutional affiliations and some technology driven paradigms. Libraries worldwide play an essential role in supporting development through equitable access to quality assured information.

Print ISBN: 978-1-68250-427-7 | \$145 | 2018 | Hardcover

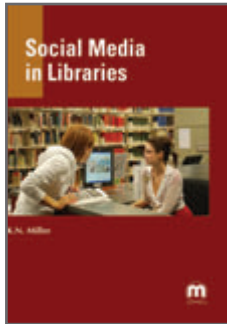


Library & Information Science Research

Editor: R Y Boher

LIS research has been changing from traditional topics to diversified topics in view of emerging trends in library management and services. In view of this, the traditional method of discharging responsibilities in most fields of human endeavor is gradually going into extinction and thus, the need to move along with times. This book explores the development, trends and research of library and information sciences (LIS) in the digital age. Promoting the value of research to practitioners, the wealth of resources available to support practitioner engagement in research, are also discussed.

Print ISBN: 978-1-68250-428-4 | \$155 | 2018 | Hardcover



Social Media in Libraries

Editor: K.N. Miller

The growth of social media and social networking sites has been one of the most impressive aspects of the internet in recent years and its popularity is undeniable. The aim of this literature is to study the association between libraries, social media, and users, meeting on information accomplishments. It examines how Libraries can leverage on social networking and Social Media skills to provide dynamic library services in the face of dwindling economic problems. The unprecedented technological advancement of the 21st century, no doubt has impacted on library services globally.

Print ISBN: 978-1-68250-470-3 | \$145 | 2018 | Hardcover

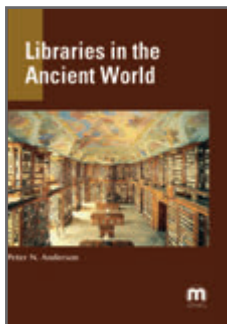


Developing Library Collections: Academic, Public, and Special Libraries

Editor: I.Y. Jordan

Collection management cannot be successful unless it is integrated within all library operations and the responsible librarian has an understanding of and close relationship with other library operations and services. This book discusses the importance of collection development in libraries. Various factors have to be taken into consideration while developing a qualitative collection for the benefit of the users. These factors include policies, principles, techniques and procedures, problems associated with collection/ development and weeding out as well.

Print ISBN: 978-1-68250-471-0 | \$145 | 2018 | Hardcover



Libraries in the Ancient World

Editor: Peter N. Anderson

From ancient times to the present many cultures around the world have considered libraries as storehouses of ideas, creativity and knowledge. The preconditions for a society to have a library are a writing script, a level of literacy, schools that foster literary skills, an educated and resourceful educated class, an interest in reading, and a publishing industry. The 'Libraries in Ancient World' is a comprehensive, embracing book presenting the story of ancient libraries from the royal libraries of the most ancient Near East, through the private and public libraries of Asia, Greece and Rome.

Print ISBN: 978-1-68250-472-7 | \$150 | 2018 | Hardcover

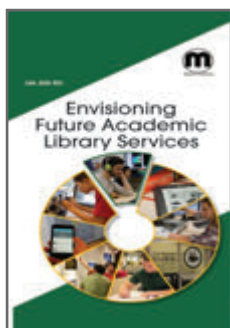


Issues for Libraries and Information Science in the Internet Age

Editor: Robert C. Simon

Digital age characterized by efficient graphic user interface, digital imaging, efficient transfer and storage of texts, is presenting important challenges for the libraries. Information privacy, copyrights, and information security are some of the challenging issues faced by the libraries in digital age. This book is an attempt to bring various issues to spotlight that can impede the digitization process in libraries. It is hoped that this exploratory effort would help the researchers as well as practitioners to devise strategies that could address the challenges associated with the digital age in an effective way.

Print ISBN: 978-1-68250-473-4 | \$150 | 2018 | Hardcover



Envisioning Future Academic Library Services

Editor: Lee Jain Kin

As the information technologies are changing day-to-day and growing at a tremendous speed, the knowledge society is becoming more complex, competitive and dependent on technological changes and information explosion. The need for e-information services to the users are also growing and becoming very essential. The impact of web based e-learning and teaching environment has influenced every facet of library and information services in academic libraries and providing new opportunities and challenges to the library professional for involvement in the knowledge based society including electronic and multimedia publishing, Internet based-information services, global networking, web based digital resources etc. Librarians need to be 'blended professionals' who can take all their professional skills and experience, and adapt them to different business models, strategic challenges and communities of practice. This book is essential reading for all library managers and educators who wish to add real value to their organization by thinking strategically and informing decision making at organizational level. It will also be of great value to academic administrators and government policy analysts involved with learning and teaching.

Print ISBN: 978-1-68250-331-7 | \$150 | 2017 | Hardcover

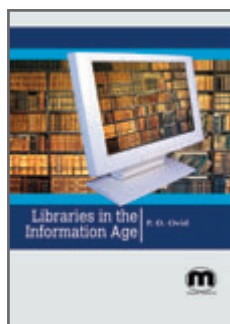


Strategic Planning and Management for Library Managers

Editor: Rachel Yaan

Although rarely linked, there are a number of similarities between strategic planning and organizational development. Both approaches are used by administrators to manage change in a systematic fashion. Strategic planning emphasizes environmental scanning and goal setting, whereas organizational development relies on intervention techniques, such as benchmarking and team building. The focus of this book is on organizational politics of strategic planning, an interdisciplinary subject that is often overlooked in both management and library literatures. Libraries enter into strategic planning by a variety of routes, from dynamic technology and rising costs to budget cuts and pressure for change. This book guides library manager toward a greater understanding of the role of strategic planning and its attendant responsibilities. Academic, public, and special librarians alike will benefit from explanations, real-life examples, and time-tested recommendations.

Print ISBN: 978-1-68250-328-7 | \$150 | 2017 | Hardcover



Libraries in the Information Age

Editor: P. D. Ovid

This book provides an important overview of libraries in the era of electronic information. It helps students as well as researchers and practitioners build necessary core knowledge in such areas as electronic dissemination of information, the impact of the Internet on libraries, the changing responsibilities of library professionals, the new paradigm for evaluating information, and characteristics and functions of today's library personnel. The book discovers the structure and theory behind the learning-centered library and its focus on information literacy, and examines implementation strategies, learning methods, planning, and community involvement.

Print ISBN: 978-1-68250-324-9 | \$150 | 2017 | Hardcover



Practical Cataloguing

Editor: P.L. Johnson

A library catalog or library catalogue is a register of all bibliographic items found in a library or group of libraries, such as a network of libraries at several locations. This book simplifies the preparation of entries of various types of books, ranging from simple titles, single to multi-volume or composite books with the help of illustrative examples which help the reader grasp the basic rules of the cataloguing code. This book provides readers with an introduction to current catalogs and standards, and examine publication formats, bibliographic elements, access points, and headings.

Print ISBN: 978-1-68250-332-4 | \$150 | 2017 | Hardcover



Strategies for Library and Information Science Research

Editor: J.K. Peter

Library and Information Science (LIS) is the academic and professional study of how information and information carriers are produced, disseminated, discovered, evaluated, selected, acquired, used, organized, maintained, and managed. It provides a unique perspective on the profound impact information makes on people and society as a whole. This book explores the development, trends and research of library and information sciences. The book provides a theoretically informed research guide and draws attention to areas of potential research in Library and Information Science.

Print ISBN: 978-1-68250-334-8 | \$150 | 2017 | Hardcover



Library Automation

Editor: Ken Patterson

Library automation refers to the use of computer to automate the typical procedures of libraries such as cataloging and circulation. Automation of the library helps take some of the workload off of librarians and other staff members in the areas of acquisitions, cataloging and circulation, which in turn allows them to better serve their patrons. This extra time can lead to more programs being facilitated in the library and make library staff available to answer reference questions and help people who having trouble researching or finding the right information. This book is essential for library leaders, technology experts, and library vendors interested in the future of library automation and its impact on the decline of human interaction in libraries.

Print ISBN: 978-1-68250-325-6 | \$150 | 2017 | Hardcover



Small Public Library Management

Editor: D.L. Carol

Library management is a sub-discipline of institutional management that focuses on specific issues faced by libraries and library management professionals. Library management encompasses normal management tasks as well as intellectual freedom, anti-censorship, and fundraising tasks. Issues faced in library management frequently overlap those faced in management of non-profit organizations. This book includes all topics which administrators need to keep a handle on library operations, freeing them up to streamline and improve how the organization functions.

Print ISBN: 978-1-68250-326-3 | \$150 | 2017 | Hardcover

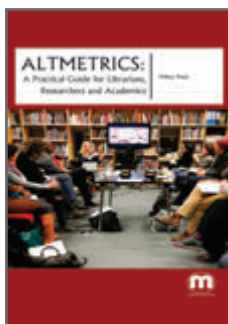


Cloud Computing for Libraries

Editor: J.L. Corrado

Cloud computing is being used in every domain like business, industries, corporate sectors. Through cloud computing one can access hardware and software promptly through internet. Application of cloud computing in libraries is a relatively new area as compared to its applications in business and corporate sector. Libraries all over the world are moving towards cloud computing implementation to use the features and services of it to make their infrastructures and services better. This book discusses the basics of cloud computing along with its characteristics, types, advantages, needs and applications in field of libraries.

Print ISBN: 978-1-68250-327-0 | \$150 | 2017 | Hardcover



Altmetrics: A Practical guide for Librarians, Researchers, and Academics

Editor: Pitter Paul

In scholarly publishing, tracking the citation frequency of research can be a powerful tool to determine the reach and impact of the work. In recent years, it has become more common to measure this with altmetrics, as opposed to the traditional impact factor, or "the average number of citations of recent articles published in a journal. This book gives an overview of altmetrics, their tools and how to implement them successfully to boost your research output. This book is of valuable tool for library and information professionals working higher education, research bodies, government bodies and charities; researchers, academics, higher education leaders, and strategists.

Print ISBN: 978-1-68250-330-0 | \$150 | 2017 | Hardcover



Foundations of Library and Information Science

Contributors: Rositsa Krasteva, Tereza Trencheva et al.

Library and Information Science is a profession that is full of people passionate about making a positive change in the world and they tend to be wildly happy about what they do. Also it work to design and develop knowledge organization systems. This book concerns with metatheories in Library and Information Science (LIS) and especially with the philosophy of science of LIS. Metatheories are theories about the description, investigation, analysis or criticism of the theories in a domain.

Print ISBN: 9781682502471 | \$160 | Pub Year: 2016 | Hardcover



Management of Libraries

Contributors: Andrew McDonald et al.

Library management is a sub-discipline of institutional management that focuses on specific issues faced by libraries and library management professionals and also the issues faced in it frequently overlap those faced in management of non-profit organizations. This book includes everything for that are need to keep a handle on library operations, freeing them up to streamline and improve how the organization functions.

Print ISBN: 9781682502525 | \$160 | Pub Year: 2016 | Hardcover

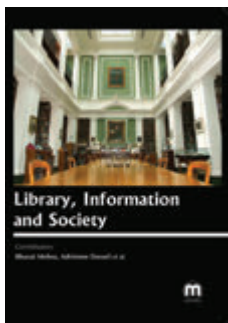


LIBRARY DEVELOPMENT

Contributors: Tie-Ming Liu, Lie-Hui Jiang et al.

Library development is the process of meeting the information needs of the people in a timely and economical manner using information resources locally held, as well as from other organizations. This book includes how information resources are organized to serve the needs of select user group, how people interact with classification systems and technology, how information is acquired, evaluated and applied by people in and outside of libraries as well as cross-culturally.

Print ISBN: 9781682502488 | \$160 | Pub Year: 2016 | Hardcover



LIBRARY, INFORMATION AND SOCIETY

Contributors: Bharat Mehra, Adrienne Dessel et al.

A library is a means of access to information, ideas and works of imagination for the society and all other fields. Libraries take many physical forms, ranging from large purpose-built buildings, to rooms in parent institutions, and small temporary structures. Library and information services are key factors in providing unhindered access to essential resources for economic and cultural advance. This book highlights the aims that bring together works related to the changing role of the library as a social institution in the emerging information society.

Print ISBN: 9781682502495 | \$160 | Pub Year: 2016 | Hardcover



CATALOGUING AND INDEXING

Contributors: Giuliano Genetasio et al.

Cataloguing provides information such as creator names, titles, and subject terms that describe resources, typically through the creation of bibliographic records. Whereas Indexing is an indirect shortcut derived from and pointing into, a greater volume of values, data, information or knowledge and process of entering information from historical records into an online, searchable database. This book covers the important issues in the field, including archival finding aids, search engines, the major indexing and abstracting databases, subject guides, vendor-supplied cataloging records and much more.

Print ISBN: 9781682502518 | \$160 | Pub Year: 2016 | Hardcover



LIBRARY AND INFORMATION SCIENCE RESEARCH: CURRENT TRENDS

Contributors: Goretti Kabatangare Tumuhairwe et al.

Library and information science is a profession that is full of people passionate about making a positive change in the world and they tend to be wildly happy about what they do. Also it works to design and develop knowledge organization systems. This book presents the latest scientific achievements of library researchers and professionals on the qualitative and quantitative methods of Libraries.

Print ISBN: 9781682502532 | \$160 | Pub Year: 2016 | Hardcover



Protein Engineering and Design

Contributors: Steven M. Lewis, Brian A. Kuhlman et al.

Protein engineering refers to the process of developing useful or valuable proteins. In protein engineering, rational protein design and directed evolution strategies are used. The scientist uses detailed knowledge in rational protein design of the structure and function of the protein to make anticipated changes. Random mutagenesis is applied to a protein, and a selection regime is used to pick out variants that have the desired qualities. Further rounds of mutation and selection are then applied. This book focuses on the topics relevant to the engineering, design and selection of proteins for use in biotechnology and therapy, and for understanding fundamental properties of activity, stability, folding, misfolding and disease.

Print ISBN: 9781682500552 | \$ 170 | Pub Year: 2016 | Hardcover

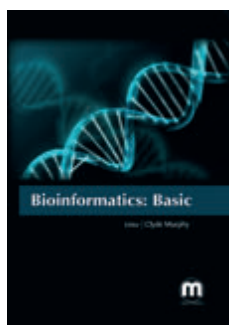


Handbook of Metabolic Pathway Engineering

Contributors: M. Kalim Akhtar, Patrik R. Jones et al.

Metabolism refers to the total of an organism's chemical reactions. A metabolic pathway is a series of steps found in biochemical reactions that help convert molecules or substrates, such as sugar, into different, more readily usable materials. These reactions occur inside of a cell, where enzymes, or protein molecules, break down or build up molecules. These enzymes are similar to traffic lights in that they can slow, speed up, and stop metabolic processes. Pathways are required for the maintenance of homeostasis within an organism and the flux of metabolites through a pathway is regulated depending on the needs of the cell and the availability of the substrate. The end product of a pathway may be used immediately, initiate another metabolic pathway or be stored for later use. This book gives a systematic and comprehensive overview of the burgeoning field of metabolic pathway engineering and focuses on the future areas of metabolic engineering and the impact of new technologies.

Print ISBN: 9781682500569 | \$ 190 | Pub Year: 2016 | Hardcover

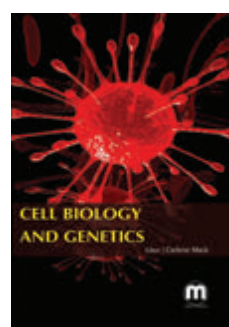


Bioinformatics: Basic

Editor: Clyde Murphy

Bioinformatics is the application of computer technology to the management of biological information. Computers are used to gather, store, analyze and integrate biological and genetic information which can then be applied to gene-based drug discovery and development. The need for bioinformatics capabilities has been precipitated by the explosion of publicly available genomic information resulting from the human genome project. The science of bioinformatics is essential to the use of genomic information in understanding human diseases and in the identification of new molecular targets for drug discovery. This book covers concepts, databases and tools of bioinformatics.

Print ISBN: 9781682500576 | \$ 160 | Pub Year: 2016 | Hardcover



Cell Biology and Genetics

Editor: Carlene Mack

The Cell Biology and Genetics employs a wide range of genetic and biochemical approaches to investigate fundamental processes in eukaryotic cells of microbes and multicellular organisms. This book takes through the fundamental principles of cell biology and genetics in a comprehensive yet concise integrated format.

Print ISBN: 9781682501351 | \$ 170 | Pub Year: 2016 | Hardcover

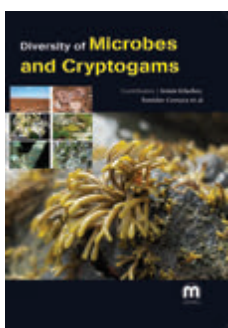


Cytology, Genetics, and Cytogenetics

Contributors: Marina F. Sanamyan, Julia E. Petlyakova et al.

Cytogenetics is a branch of genetics that is the study of the structure and function of the cell, especially the chromosomes. Whereas cytology is that branch of life science that deals with the study of cells in terms of structure and function. The book attempts to solve the problem of disseminating information in the rapidly changing fields of genetics and cytology.

Print ISBN: 9781682501283 | \$ 170 | Pub Year: 2016 | Hardcover



Diversity of Microbes and Cryptogams

Contributors: Armin Erlacher, Tomislav Cernava et al.

Microbes are single-cell organisms so tiny that millions can fit into the eye of a needle. They are the oldest form of life on earth. Microbe fossils date back more than 3.5 billion years to a time when the Earth was covered with oceans that regularly reached the boiling point, hundreds of millions of years before dinosaurs roamed the earth. Cryptogams is a name referring to plants and fungi that do not reproduce by seeds. This book details on the diversity of microbes and cryptogams.

Print ISBN: 9781682501368 | \$ 170 | Pub Year: 2016 | Hardcover



Biotechnology and Genetic Engineering

Contributors: Youjia Hu et al.

Genetic engineering is the direct manipulation of an organism's genome using biotechnology. It has been applied in numerous fields, not restricted to, including research, agriculture, industrial biotechnology, and medicine. This book attempts all the fundamental review of biotechnology in genetic engineering and also gives an idea of the relation between biotechnology and health, nutrition, agriculture and environment science.

Print ISBN: 9781682501344 | \$ 170 | Pub Year: 2016 | Hardcover



Biomolecules

Contributors: Radu M. Nanau, Manuela G. Neuman et al.

A biomolecule is any molecule that is present in living organisms, including large macromolecules such as proteins, carbohydrates, lipids, and nucleic acids. This book provides a readily accessible source of information about biomolecules and aims to convey some of the fascination of the chemistry responsible for sustaining life.

Print ISBN: 9781682501405 | \$ 170 | Pub Year: 2016 | Hardcover



Biophysical and Biochemical Techniques

Contributors: William Grosvenor, Yuri Kaulin et al.

Biochemistry is an interdisciplinary science that systematically integrates principles of mathematics, physics and chemistry to explain distinctive features of life processes in terms of structure function correlations. Advances in biochemistry owe mainly to exploitation of principles and techniques used in physical sciences. Combination of biochemistry, cell biology and microbiology, in the recent past, to form molecular biology has led to great advances in understanding and control of biological processes in medicine, agriculture and pharmacology and food industries. During the recent past, biochemical methods have become specialized and sophisticated and proper understanding of the technique in its use in biochemical investigations is very important to arrive at any meaningful result. This book envisages various techniques used in chemistry to probe the structure of biological systems.

Print ISBN: 9781682501412 | \$ 170 | Pub Year: 2016 | Hardcover



Microbiology and Virology

Contributors: Michele Lunardi, Amauri Alcindo Alfieri et al.

Microbiology is the study of microscopic organisms, those being unicellular multicellular or a cellular. Microbiology encompasses numerous sub-disciplines including virology, mycology. Whereas Virology is the study of viruses submicroscopic, parasitic particles of genetic material contained in a protein coat. This book focuses on the following aspects of microbiology and viruses: their structure, classification and evolution.

Print ISBN: 9781682501443 | \$ 170 | Pub Year: 2016 | Hardcover

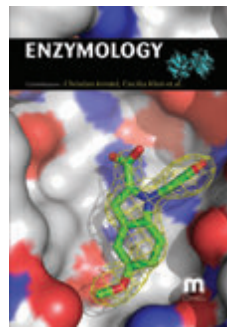


Protein Engineering: Technology and Application

Contributors: Tomohiro Hiraishi, Seiichi Taguchi et al.

Protein engineering is termed as the process of developing valuable proteins. It is a young discipline, with much research taking place into the understanding of protein folding and recognition for protein design principles. There are two general strategies for protein engineering, 'rational' protein design and directed evolution. These techniques are not mutually exclusive; researchers will often apply both. In the future, more detailed knowledge of protein structure and function, as well as advancements in high-throughput technology, may greatly expand the capabilities of protein engineering. This book presents reviews on applied technologies in protein engineering and its application.

Print ISBN: 9781682502624 | \$ 170 | Pub Year: 2016 | Hardcover



Enzymology

Contributors: Christian Krintel, Cecilia Klint et al.

Enzymology is the study of enzymes, their kinetics, structure, and function, as well as their relation to each other. Regulation of enzymes and enzyme production are also covered in enzymology, as are the roles of inhibitors and promoters of enzyme activity. This book consists of the fundamentals of enzymology and describes the role of enzymes in food, agricultural and health sciences.

Print ISBN: 9781682501429 | \$ 170 | Pub Year: 2016 | Hardcover

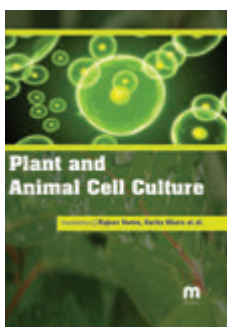


Cell Biology and Membrane

Contributors: Bruno Pontes, Yareni Ayala et al.

Cell biology is the study of cell structure and function, and it revolves around the concept that the cell is the fundamental unit of life. On the other side cell membrane is selectively permeable to ions and organic molecules and controls the movement of substances in and out of cells. This book focusing on the cell permits a detailed understanding of the tissues and organisms that cells compose.

Print ISBN: 9781682501450 | \$ 170 | Pub Year: 2016 | Hardcover



Plant and Animal Cell Culture

Contributors: Rajeev Nema, Sarita Khare et al.

Cell culture is the process by which cells are grown under controlled conditions, generally outside of their natural environment. In practice, the term "cell culture" now refers to the culturing of cells derived from multicellular eukaryotes, especially animal cells, in contrast with other types of culture that also grow cells, such as plant tissue culture, fungal culture, and microbiological culture. The historical development and methods of cell culture are closely interrelated to those of tissue culture and organ culture. This book emphasizes on theoretical and practical knowledge of the basic techniques in plant and animal cell culture.

Print ISBN: 9781682501573 | \$ 170 | Pub Year: 2016 | Hardcover

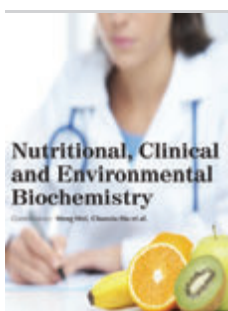


Cell Biology and Physiology

Contributors: Verena Ibl, Eva Stoger et al.

Cell Biology and Physiology studies cells, their physiological properties, their structure, the organelles they contain, interactions with their environment, their life cycle, division, and cell function. This book focuses on the issues in cell biology and physiology.

Print ISBN: 9781682501474 | \$ 170 | Pub Year: 2016 | Hardcover

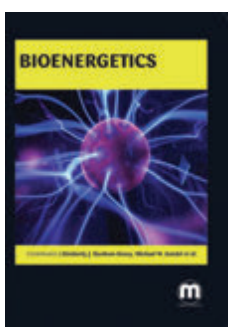


Nutritional, Clinical, and Environmental Biochemistry

Contributors: Heng Wei, Chunxiu Hu et al.

Nutritional, Clinical and Environmental Biochemistry offers a core emphasis on the scientific fundamentals of nutrition and metabolism throughout the lifespan from the molecular to the organismal level. The concentration in nutritional biochemistry links nutrigenomics, nutrigenetics, and biotechnology with human health, regulation of metabolism, and the pathophysiology of inherited and chronic disease. Clinical chemistry relates to clinical chemistry, molecular biology and genetics, therapeutic drug monitoring and toxicology, laboratory immunology and laboratory medicine in general. Chemistry and biochemistry for a clean environment is an important focus of the societal challenges and to develop methodologies that ensure a clean and healthy environment.

Print ISBN: 9781682501436 | \$ 170 | Pub Year: 2016 | Hardcover

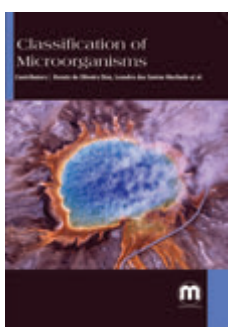


Bioenergetics

Contributors: Kimberly J. Dunham-Snary, Michael W. Sandel et al.

Important field of biochemistry that concerns energy flow through living systems and involved in making and breaking of chemical bonds in the molecules found in biological organisms. This book consists the collection of disciplines within biochemistry and physiology that aims at a description and understanding of the function of living systems.

Print ISBN: 9781682501481 | \$ 170 | Pub Year: 2016 | Hardcover

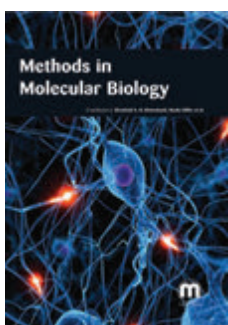


Classification of Microorganisms

Contributors: Renata de Oliveira Dias, Leandro dos Santos Machado et al.

Microorganism is a microscopic living organism, which may be single celled or multicellular. It lives in every part of the biosphere and are very diverse and include all the bacteria and archaea and almost all the protozoa. This book attempts and examine the classification of microorganisms.

Print ISBN: 9781682501535 | \$ 170 | Pub Year: 2016 | Hardcover

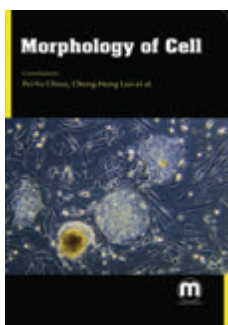


Methods in Molecular Biology

Contributors: Elrasheid A. H. Kheirelseid, Nicola Miller et al.

Molecular biology concerns the molecular basis of biological activity between the various systems of a cell, including the interactions between the different types of DNA, RNA and proteins and their biosynthesis, and studies how these interactions are regulated. This book comprises basic methods that use in molecular biology, also discusses the heart of the most recent revolution in biology-the development of the technology of genetics.

Print ISBN: 9781682501498 | \$ 170 | Pub Year: 2016 | Hardcover



Morphology of Cell

Contributors: Pei-Yu Chiou, Cheng-Hung Luo et al.

Morphology of cell is essential in identifying the shape, structure, form, and size of cells. In bacteriology, for instance, cell morphology pertains to the shape of bacteria if cocci, bacilli, spiral, etc. and the size of bacteria. This book discusses about the morphological study of the cell and determining it is essential in bacterial taxonomy.

Print ISBN: 9781682501542 | \$ 170 | Pub Year: 2016 | Hardcover



Microbial Biochemistry

Contributors: Raman Gurusamy, Sakthivel Natarajan et al.

It allows the formulation of concepts that turns out to be important in the study of higher organisms and analyses the mechanisms by which cells obtain the energy necessary for their growth, glycolysis, the pentose phosphate pathway, the tricarboxylic and the cataplerotic cycles. This book covers the principles and importance of microbes, their growth as well as their effects on our environment at large and human health in particular.

Print ISBN: 9781682501528 | \$ 170 | Pub Year: 2016 | Hardcover

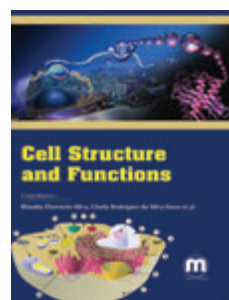


Cell Biology Techniques

Editor: Earnestine Copeland

The cell biology provides a wide range of genetic and biochemical approaches to investigate fundamental processes in eukaryotic cells of microbes and multicellular organisms. This book evaluates the different types of techniques that play important role in it.

Print ISBN: 9781682501559 | \$ 170 | Pub Year: 2016 | Hardcover

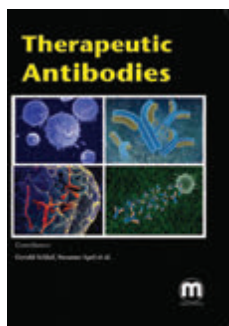


Cell Structure and Functions

Contributors: Rinaldo Florencio-Silva, Gisela Rodrigues da Silva Sasso et al.

The cell is the basic structural, functional, and biological unit of all known living organisms. All living organisms on Earth are divided into cells. The main concept of cell theory is that cells are the basic structural unit for all organisms. Cells are small compartments that hold the biological equipment necessary to keep an organism alive and successful. Living things may be single-celled or they may be very complex such as a human being. This book details on the cell structure and functions.

Print ISBN: 9781682501764 | \$ 170 | Pub Year: 2016 | Hardcover

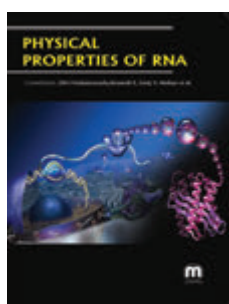


Therapeutic Antibodies

Contributors: Gerald Schlaf, Susanne Apel et al.

Therapeutic antibodies are man-made substances that are able to bind to specific proteins on the surfaces of cells. In some cases, the binding specificity of therapeutic antibodies is used to precisely deliver drugs or drug-activating enzymes to precise cellular locations. These are monoclonal antibodies, meaning that they are antibodies produced by clones of a single immune cell. This book discusses all clinicians involved with this form of treatment, especially accident and emergency physicians, clinical immunologists, and pharmacologists.

Print ISBN: 9781682502273 | \$ 170 | Pub Year: 2016 | Hardcover



Physical Properties of RNA

Contributors: Divi Venkateswarlu, Kenneth E. Lind, V. Mohan et al.

Ribonucleic acid or RNA is a polymer or chain of nucleotide units, each comprising a nitrogenous base (adenine, cytosine, guanine, or uracil), a five-carbon sugar (ribose), and a phosphate group. The sugar and phosphate groups form the polymer's backbone, while the nitrogenous bases extending from the backbone provide RNA's distinctive properties. In living cells, RNA in different configurations fulfills several important roles in the process of translating genetic information from deoxyribonucleic acid (DNA) into proteins. Despite its key role in the transfer of genetic information, the physical structure of the enzyme RNA polymerase remains relatively unexplored. The book gives an emphasis on the structure and physical properties of RNA.

Print ISBN: 9781682501580 | \$ 170 | Pub Year: 2016 | Hardcover



Ecological Biochemistry

Contributors: A. Exadactylos et al.

Ecological biochemistry concerns the biochemistry of interactions between animals, plants and the environment, and includes such diverse subjects as plant adaptations to soil pollutants and the effects of plant toxins on herbivores. Biotic and abiotic factors determine the biochemical flexibility of organisms, which otherwise easily adapt to environmental changes by altering their metabolism. This book covers the chemistry behind these interactions, bottom up from the atomic to the system's level.

Print ISBN: 9781682502211 | \$ 170 | Pub Year: 2016 | Hardcover

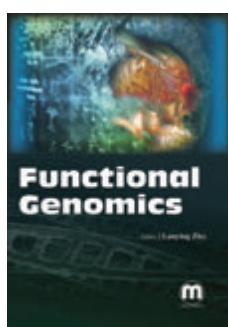


Bioinformatics: Trends and Methodologies

Contributors: Attwood, T.K., Gisel, A., et al.

Bioinformatics is an interdisciplinary field that develops methods and software tools for understanding biological data. As an interdisciplinary field of science, bioinformatics combines computer science, statistics, mathematics, and engineering to analyze and interpret biological data. Bioinformatics is both an umbrella term for the body of biological studies that use computer programming as part of their methodology, as well as a reference to specific analysis "pipelines" that are repeatedly used, particularly in the fields of genetics and genomics. Common uses of bioinformatics include the identification of candidate genes and nucleotides. This book presents the views on most recent topics and basic concepts in bioinformatics and new techniques and their applications in biomedical science.

Print ISBN: 9781682502570 | \$ 170 | Pub Year: 2016 | Hardcover

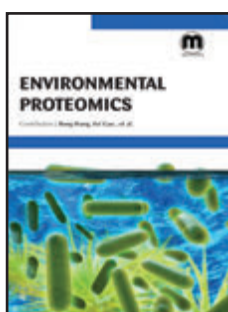


Functional Genomics

Editor: Lanying Zhū

Functional genomics uses genomic data to study gene and protein expression and function on a global scale, focusing on gene transcription, translation and protein-protein interactions, and often involving high-throughput methods. The goal of functional genomics is to understand the relationship between an organism's genome and its phenotype. Functional Genomics provide a more complete picture of how biological function arises from the information encoded in an organism's genome. The possibility of understanding how a particular mutation leads to a given phenotype has important implications for human genetic diseases, as answering these questions could point scientists in the direction of a treatment or cure.

Print ISBN: 9781682502686 | \$ 170 | Pub Year: 2016 | Hardcover

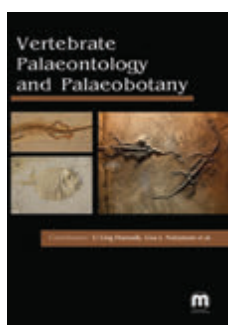


Environmental Proteomics

Contributors: Rong Wang, Fei Gao et al.

Environmental proteomics is a powerful tool that can be used to investigate the physiology of any organism. This allows us to query the organism's response without assuming ahead of time that it will respond in a certain way. This book demonstrates the ability to obtain proteomic data for communities of microorganisms and for environmental isolates and providing the unique insights into the physiology and ecology of these systems.

Print ISBN: 9781682502280 | \$ 170 | Pub Year: 2016 | Hardcover



Vertebrate Palaeontology and Palaeobotany

Contributors: Li Ling Hamady, Lisa J. Natanson et al.

Vertebrate paleontology is a large subfield to paleontology seeking to discover the behavior, reproduction and appearance of extinct animals with vertebrae or a notochord, through the study of their fossilized remains. It also tries to connect, by using the evolutionary timeline, the animals of the past and their modern-day relatives. Whereas paleobotany, the branch of paleontology, deals with the recovery and identification of plant remains from geological contexts, and their use for the biological reconstruction of past environments. The book deals with topics of broad interest to the entire vertebrate paleontology community and to high-impact specialist studies.

Print ISBN: 9781682502143 | \$ 170 | Pub Year: 2016 | Hardcover



Applied Biotechnology: Advances

Editor: Jinjing Zhōu

Biotechnology is a broad discipline in which biological processes, organisms, cells or cellular components are exploited to develop new technologies. New tools and products developed by biotechnologists are useful in research, agriculture, industry and the clinic. It is very important to make the specific difference between biotechnology as a distinct science of getting valuable products from molecules, cells or tissues of viable organisms, and any other applications of bioprocesses that are based on using the whole living plants or animals in different fields of human activities such as bioremediation, environmental protection, organic agriculture, or industrial exploitation of natural resources. This book presents topics on biotechnological applications, related to the newest biotechnological achievements in environmental protection, medicine and health care, biopharmaceutical producing, molecular genetics, and tissue engineering are presented.

Print ISBN: 9781682502631 | \$ 170 | Pub Year: 2016 | Hardcover



Business Environment

Contributors: Sergio A. David, Clivaldo Oliveira et al.

Business environment is the study of both the internal and external environmental factors related to a business, with the aim of finding out how such factors affect the business. It is a catchall term given to the systematic process by which environmental factors in a business are identified. The book offers an accessible approaches to the subject area with a strong focus on the business environment, rather than purely an economic context.

Print ISBN: 9781682501870 | \$ 160 | Pub Year: 2016 | Hardcover



Strategic Management

Contributors: Milly Perry et al.

Strategic management is a business approach that is utilized to make the most efficient use of available resources in the process of operating a company. It provides overall direction to the enterprise and involves specifying the organization's objectives, developing policies and plans designed to achieve these objectives, and then allocating resources to implement the plans. This book provides a unique approach goes beyond the traditional application for the for profit sector to address issues for the non-profit sector.

Print ISBN: 9781682501955 | \$ 160 | Pub Year: 2016 | Hardcover



Consumer Behavior

Editor: AI Wang

Consumer behavior is a study of this phenomenon will often focus on the psychological and other factors that motivate people to either buy a product or reject it in favor of some other option. It attempts to understand the decision-making processes of buyers, both individually and in groups such as how emotions affect buying behavior. This book examines the role of consumers as individuals and decision makers and explores the relationships between consumers and culture and looks at the impact of current trends, such as digital media and globalization, on consumer behavior.

Print ISBN: 9781682501962 | \$ 160 | Pub Year: 2016 | Hardcover

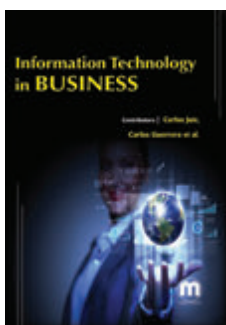


Dynamic Customer Strategy

Contributors: Mohammed T. Nuseir, Hilda Madanat et al.

A dynamic customer strategy, often called a customer experience strategy, is a plan for creating or improving the customer experience. A good strategy considers the customers, their needs, and how anyone can best meet them. This book provides a process for rigorous decision making, eliminating the paralysis and optimizing decision making for marketing performance. The goal of customer is to inform marketing practice and help current and future business leaders navigate through the competitive storms unleashed by technological change.

Print ISBN: 9781682502372 | \$ 160 | Pub Year: 2016 | Hardcover



Information Technology in Business

Contributors: Carlos Juiz, Carlos Guerrero et al.

Information technology is a modern phenomenon that has dramatically changed the daily lives of individuals and businesses throughout the world. Technology provides a wide range of tools entrepreneurs can use to guide their new companies through the startup and growth stages. Leveraging information technology for business success is key to survival in the modern business world. The book provides the different application of information technology that are useful for success of the business.

Print ISBN: 9781682502006 | \$ 160 | Pub Year: 2016 | Hardcover



Entrepreneurship Education and Training

Editor: Jie Yang

Entrepreneurship has a tremendous impact on the economic development of a country, so much that entrepreneurship is seen as a solution for the fast changing economic demands worldwide and has been recognized as a path to sustainable economic development. Because education is key to shaping young people's attitudes, skills and culture, it is vital that entrepreneurship education is addressed from an early age. Entrepreneurship education is essential not only to shape the mindsets of young people but also to provide the skills and knowledge that are central to developing an entrepreneurial culture. This leads to a discussion on whether or not entrepreneurship can be successfully taught. This book details on the experiences in entrepreneurship education, explain how to teach entrepreneurial skills, cultural issues, and propose some orientations and reflections on entrepreneurship education.

Print ISBN: 9781682502600 | \$ 160 | Pub Year: 2016 | Hardcover

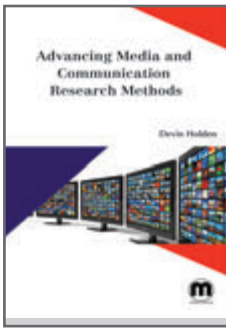


Handbook of Market Intelligence

Contributors: Gernot Hinterleitner, Ulrike Leopold-Wildburger et al.

Market intelligence is the practice of gathering information about the market for a product or service to help an organization better plan its marketing tactics. The main goal of market intelligence is to improve the success of the product efficiently and at as low a cost as possible. This book provides an overview of the most important tools and concepts relevant to intelligence analysis for strategic decision making and also examines the client side perspective of market research and describes the pitfalls and problems when commissioning and briefing market research.

Print ISBN: 9781682502150 | \$ 170 | Pub Year: 2016 | Hardcover



Advancing Media and Communication Research Methods

Editor: Devin Holden

This book focuses on how audience perception of media consumption has changed and the changes that marketing professionals have faced over the past 50 years. It is intended to provide a wide-ranging overview of the current media and communication research studies. A valuable guide to academic, research, and professional audiences engaged in the design, development, and distribution of effective communications technologies in educational, social, and linguistic contexts.

Print ISBN: 978-1-68250-557-1 | \$150 | 2019 | Hardcover

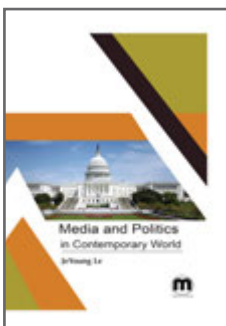


Methods in Electronic Media and Communication Research

Editor: Viviana Richard

The widely available media services are changing the ways in which we live and work and also altering our perceptions and beliefs. Intended to provide insightful and up-to-date examinations of theorizing and research that informs our current understanding of the role of media in our social lives, this book also explains different kinds of discourses and different principles, theories, and conceptual models of the society along with the role of digital media as one of the most effective tools of information and culture.

Print ISBN: 978-1-68250-558-8 | \$145 | 2019 | Hardcover



Media and Politics in Contemporary World

Editor: JeYoung Le

New technologies have transformed the campaign media system and in the process altered the ways in which campaigns are waged by candidates, reported on by journalists, and experienced by voters. This book is intended to provide a comprehensive framework to analyze the relation between media and politics by investigating the power of the internet and more specifically social media, in the political and social discourse. This book will appeal to students and scholars in media and communications, internet studies, and political science, as well as general readers keen to understand our contemporary media and political contexts.

Print ISBN: 978-1-68250-559-5 | \$145 | 2019 | Hardcover

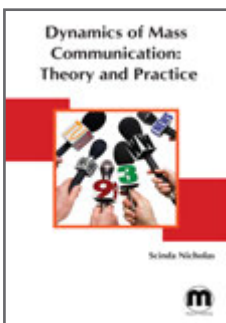


Social Media and Politics

Editor: Marcus Eckert

Social media which was once created for personal interaction among people has broadened its scope to include different activities of life. These new channels have also drastically changed the political world. This book is intended to analyze the relation between social media and politics by investigating the power of the internet and more specifically social media, in the political and social discourse. An appealing reference tool for students and scholars in media and communications, internet studies, and political science, as well as general readers keen to understand our contemporary media and political contexts.

Print ISBN: 978-1-68250-560-1 | \$155 | 2019 | Hardcover

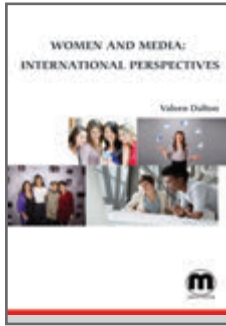


Dynamics of Mass Communication: Theory and Practice

Editor: Scinda Nicholas

It is transforming all sectors of activity and is bringing about far-reaching mutations in the economic, social and cultural fields alike. This book is intended to provide media outfit, journalists and would-be journalists with higher education for peace with the aim of promoting among all journalists and politicians a spirit of understanding, tolerance, and peaceful coexistence, to stimulate cooperation among people, and to help lessen obstacles and threats to democracy. The book presents emphasis on theory, clear-cut explanation of findings, in-depth discussion of persuasion processes and effects, and easy-to-follow real-world applications.

Print ISBN: 978-1-68250-561-8 | \$145 | 2019 | Hardcover

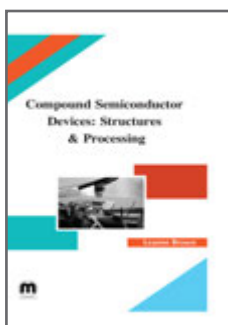


Women and Media: International Perspectives

Editor: Valeen Dalton

Over the years, the female gender is said to have come under-represented in various fields of human endeavor. This book explores the career transitions of women from the mass communication industry to academia using theory of transition. Focusing on all aspects of current and classic theories and practices relating to women in media and mass communication, the relationship between how sex stereotypes are presented in advertisements and the value women attach to themselves in the society with regards to their self-esteem is also examined.

Print ISBN: 978-1-68250-562-5 | \$150 | 2019 | Hardcover

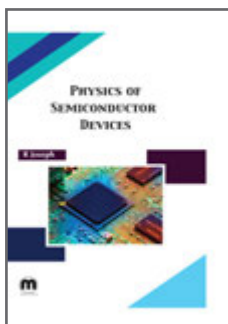


Compound Semiconductor Devices: Structures & Processing

Editor: Leanne Brown

Compound semiconductors have been a subject of semiconductor research for nearly as long as elemental semiconductors. Providing an overview of compound semiconductor materials and their technology, it describes the relevant material preparation technologies for bulk and thin-layer epitaxial growth. This book provides treatments to the science, technology, and applications of the most important of these semiconductors used by engineers and scientists.

Print ISBN: 978-1-68250-563-2 | \$155 | 2019 | Hardcover

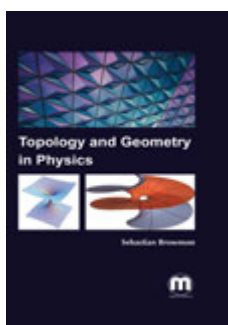


Physics of Semiconductor Devices

Editor: R Joseph

Over the years, numerous methods have been developed for the synthesis of high-efficient semiconductors. This book presents state of the art information on new developments about semiconductors, from the fundamental issues to their synthesis and applications, surface and interface physics, electronic and optoelectronic devices, and their applications. It is intended to provide a snapshot of current insights, new achievements, breakthroughs and future trends in such diverse fields as microelectronics, energy conversion and storage.

Print ISBN: 978-1-68250-564-9 | \$155 | 2019 | Hardcover

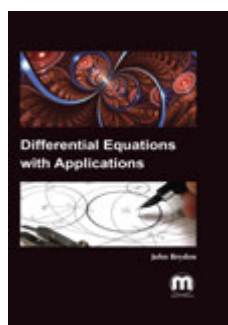


Topology and Geometry in Physics

Editor: Sebastian Brownson

Covering state of the art studies of geometrical and topological methods in theoretical physics and applied mathematics, this book is meant to fill the gap between highly advanced books or research papers and the many excellent introductory books. General topology of the universe and its evolutionary aspects are discussed in this volume. This book will be of interest to postgraduate students and practitioners working in particle physics, condensed matter physics and general relativity.

Print ISBN: 978-1-68250-565-6 | \$150 | 2019 | Hardcover

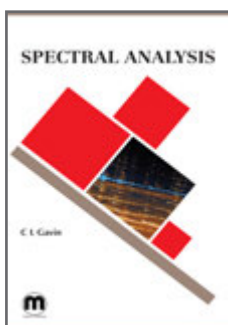


Differential Equations with Applications

Editor: John Bryden

Differential equations arising in mechanics, physics, engineering, biological sciences, economics, and other fields of sciences may be classified into either linear or nonlinear formulated as initial or boundary value problems. The book focuses on the theory and the application of differential equations that examine the state of the art, identify emerging trends, and suggest future directions for developing fields. This book is addressed not only to mathematicians but also to those engineers, physicists, and other scientists for whom differential equations are valuable research tools.

Print ISBN: 978-1-68250-566-3 | \$145 | 2019 | Hardcover

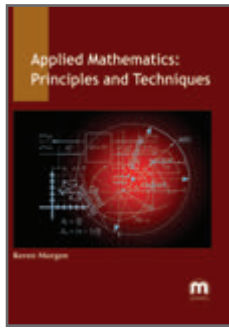


Spectral Analysis

Editor: C L Gavin

There is a great interest in researching methods of spectral analysis of the composition of liquids, based on the detection of emission spectra, produced by the substances when heated by an electric discharge. This book provides a thorough explanation of the underlying principles of spectral analysis and the full range of estimation techniques used in engineering. Valuable for students, engineers working in industry, as well as researchers dealing with the field, this book provides a rare complete overview of the spectral analysis domain.

Print ISBN: 978-1-68250-567-0 | \$155 | 2019 | Hardcover



Applied Mathematics: Principles and Techniques

Editor: Keren Morgen

Applied mathematics encompasses some of the most diverse and interdisciplinary research in the physical, engineering, and biological sciences. The problems come from various applications, such as physical and biological sciences, engineering, and social sciences. Their solutions require knowledge of various branches of mathematics, such as analysis, differential equations, and stochastic, utilizing analytical and numerical methods. This book is dedicated to the latest advancements in applied mathematics. The goal of this literature is to provide a platform for scientists and academicians all over the world to discuss various new issues and developments in different areas of applied mathematics.

Print ISBN: 978-1-68250-419-2 | \$155 | 2018 | Hardcover

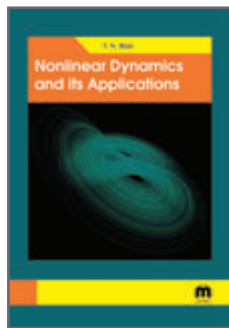


Trends in Algorithms Research

Editor: J. Walker

The use of computers, however, has elevated the sophistication and use of algorithms in daily transactions to unprecedented levels. Every time you use a computer—your laptop, phone, or a mileage calculator in a car—you are using algorithms. This book demonstrates the wide applicability of algorithms for the purpose of developing useful and practical solutions to problems that arise in a variety of problem domains. Although it is targeted to a wide group of readers: researchers, graduate students, and practitioners, it does not offer an exhaustive coverage of algorithms and applications.

Print ISBN: 978-1-68250-420-8 | \$155 | 2018 | Hardcover

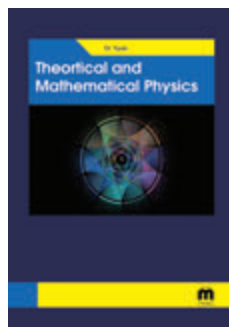


Nonlinear Dynamics and its Applications

Editor: T. N. Blair

With the successes in numerous applications from signal filtering to chemical and mass sensing, micro- and nano-electro-mechanical resonators continue to be one of the most widely studied topics of the micro-electro-mechanical systems community. This book is devoted to analyzing the nonlinear dynamics and chaotic behavior of nano resonators with electrostatic forces on both sides. It encompasses all nonlinear dynamic phenomena associated with mechanical, structural, civil, aeronautical, ocean, electrical, and control systems

Print ISBN: 978-1-68250-421-5 | \$150 | 2018 | Hardcover

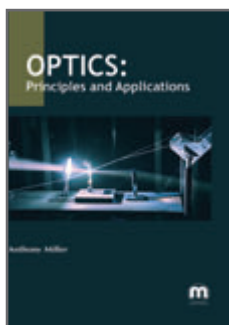


Theoretical and Mathematical Physics

Editor: D. Yaan

This work covers quantum field theory and theory of elementary particles, fundamental problems of nuclear physics, many-body problems and statistical physics, nonrelativistic quantum mechanics, and basic problems of gravitation theory. The contained chapters cover on current developments in theoretical physics as well as related mathematical problems. This book can serve as a basis for students, practitioners, and academicians, providing comprehensive information and discuss various new issues and developments in different areas of instrumentation.

Print ISBN: 978-1-68250-422-2 | \$150 | 2018 | Hardcover



Optics: Principles and Applications

Editor: Anthony Miller

The study of optics has huge applications to the technology on earth and is extremely helpful in many ways. Light plays a vital role in our daily lives and is an imperative cross-cutting discipline of science in the 21st century. This comprehensive compendium aims to present the challenging and innovating methods and techniques related to the development of optics materials, characterization and applications. It will be of great interest for engineers working on developing next generation optical components; scientists involved with research on fiber amplifiers and lasers; students and researchers working in the field of optics.

Print ISBN: 978-1-68250-423-9 | \$155 | 2018 | Hardcover

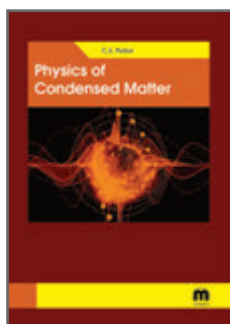


Latest Research in Photonics

Editor: W.S. Roland

The further progress in photonics, as well as in many other technological fields is connected with application of new materials. This book aims to provide the research into the design, technology and applications of integrated photonic devices, circuits, and waveguides. It is a good contribution for providing the way for further innovations in photonic technology. The chapters are contributed by well-experienced researchers in their fields. Authoritative content covers advances in all areas of optics and photonics from fundamental science to engineering applications, including materials, devices, and systems. The state-of-the-art field of photonics has considerably fascinated the interest of many societies, professionals and researchers around the world.

Print ISBN: 978-1-68250-424-6 | \$150 | 2018 | Hardcover



Physics of Condensed Matter

Editor: C.S. Potter

The field of condensed matter physics explores the macroscopic and microscopic properties of matter. In order of increasing enthalpy, the states of matter are solid, liquid, gas, and plasma. This work delivers fundamental ideas and topic areas of condensed matter physics, it also includes many recent topics of interest on which students may choose to do further research. This book will be both a compilation for the experienced researcher as well as a high level introductory text for students.

Print ISBN: 978-1-68250-425-3 | \$150 | 2018 | Hardcover

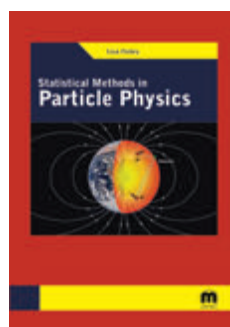


Data Analysis Techniques for High-Energy Physics

Editor: John Carter

There has been rapid progress in this area in recent years and it continues to be a fertile source of research problems. This book aims to acquaint high energy physicists with a variety of techniques for presenting and making statistical inferences from counted data. The attempt will be to introduce new techniques that are not commonly used in high energy particle physics as well as to place those methods that are familiar into the general framework of statistical data analysis. This book describes techniques for handling and analyzing data obtained from high-energy and nuclear physics experiments.

Print ISBN: 978-1-68250-451-2 | \$155 | 2018 | Hardcover

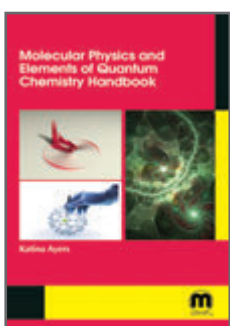


Statistical Methods in Particle Physics

Editor: Liza Finley

Statistics are involved not only in the mathematical framework for comparing experiment with theory but also in building the right computer tools to select interesting data from collisions. This concise collection provides the reader with the main concepts and tools to perform statistical analysis of experimental data, in particular in the field of high-energy physics. This book is intended for students and research workers in experimental high-energy and elementary particle physics.

Print ISBN: 978-1-68250-452-9 | \$155 | 2018 | Hardcover

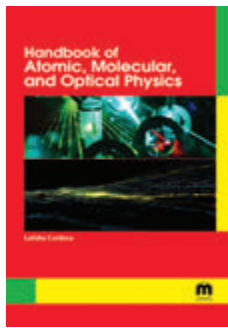


Molecular Physics and Elements of Quantum Chemistry Handbook

Editor: Katina Ayers

Over the span of two decades, molecular modeling has emerged as a viable and powerful approach to chemistry. This guide attempts to help chemists find that proper balance. It focuses on the underpinnings of molecular mechanics and quantum chemical methods, their relationship with "chemical observables", their performance in reproducing known quantities and on the application of practical models to the investigation of molecular structure and stability and chemical reactivity and selectivity. This handbook will be of valuable to students, researchers and scholars.

Print ISBN: 978-1-68250-453-6 | \$150 | 2018 | Hardcover

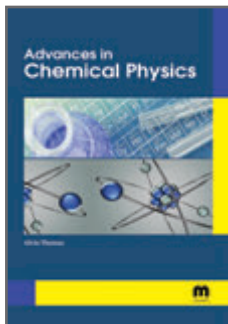


Handbook of Atomic, Molecular, and Optical Physics

Editor: Latisha Cordova

Atomic, molecular, and optical physics (AMO) is the study of matter-matter and light-matter relations; at the scale of one or a few atoms and energy scales around several electron volts. This guide covers comprehensive reference source that integrates the entire fields of atomic, molecular, and optical (AMO) physics, assembling the principal ideas, techniques and results of the field from atomic spectroscopy to applications in comets. It aims at providing something like the canonical knowledge of modern atomic and molecular physics and optical physics. All of these topics constitute a vital area of active and highly productive research in physics.

Print ISBN: 978-1-68250-454-3 | \$155 | 2018 | Hardcover

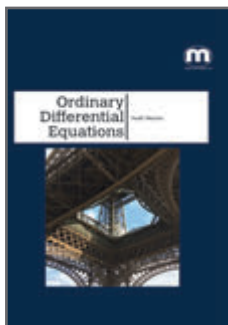


Advances in Chemical Physics

Editor: Alvin Thomas

Chemical physics span the gamut of applications at the frontiers of chemistry and biology. Researchers in chemical physics apply physical methods and theory to study molecular and collective properties of chemical systems. This comprehensive work presents the review and critical evaluation of the science that has propelled every area of the discipline. It is dedicated to helping the reader obtain general information about a wide variety of topics in chemical physics, a field that we interpret very broadly.

Print ISBN: 978-1-68250-455-0 | \$150 | 2018 | Hardcover

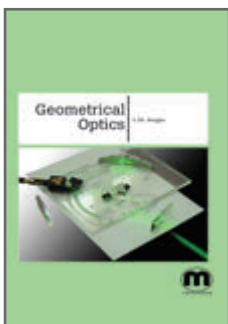


Ordinary Differential Equations

Editor: Nail Morin

An ordinary differential equation is a differential equation containing one or more functions of one independent variable and its derivatives. The term "ordinary" is used in contrast with the term partial differential equation which may be with respect to more than one independent variable. This book presents a thorough discussion of first-order differential equations and progresses to equations of higher order.

Print ISBN: 978-1-68250-395-9 | \$155 | 2017 | Hardcover

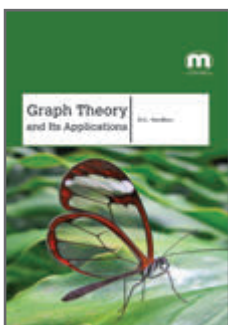


Geometrical Optics

Editor: L.M. Seeger

Geometrical optics describes light propagation in terms of rays. The ray in geometric optics is an abstraction, or instrument, useful in approximating the paths along which light propagates in certain classes of circumstances. This book emphasizes a vergence approach to geometrical and visual optics, reinforcing its fundamental utility in clinical practice.

Print ISBN: 978-1-68250-396-6 | \$155 | 2017 | Hardcover

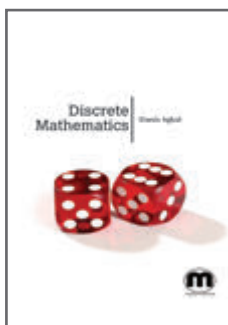


Graph Theory and Its Applications

Editor: D.L. Strelkov

Graph theory is the study of graphs, which are mathematical structures used to model pairwise relations between objects. A graph may be undirected, meaning that there is no distinction between the two vertices associated with each edge, or its edges may be directed from one vertex to another. Graphs are one of the prime objects of study in discrete mathematics. This book covers the main graph theoretic topics: connectivity, trees, traversability, planarity, coloring, covering, matching, digraphs, networks, matrices of a graph, graph theoretic algorithms, and matroids.

Print ISBN: 978-1-68250-397-3 | \$155 | 2017 | Hardcover

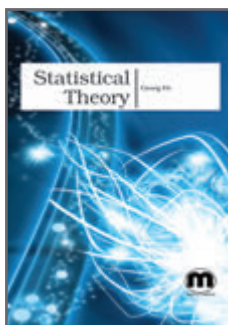


Discrete Mathematics

Editor: Danis Iqbal

Discrete mathematics is the study of mathematical structures that are fundamentally discrete rather than continuous. Discrete mathematics has been characterized as the branch of mathematics dealing with countable sets. The set of objects studied in discrete mathematics can be finite or infinite. The term finite mathematics is sometimes applied to parts of the field of discrete mathematics that deals with finite sets. This book provides broad coverage of discrete mathematics and optimization, ranging over such fields as combinatorics, graph theory, enumeration, and the analysis of algorithms.

Print ISBN: 978-1-68250-398-0 | \$155 | 2017 | Hardcover

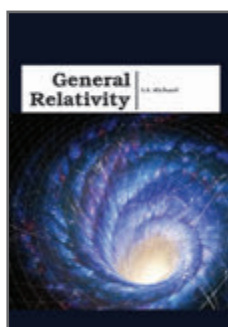


Statistical Theory

Editor: Georg Fit

The theory of statistics provides a basis for the whole range of techniques, in both study design and data analysis, that are used within applications of statistics. The theory covers approaches to statistical-decision problems and to statistical inference, and the actions and deductions that satisfy the basic principles stated for these different approaches. This book explains the underlying ideas and principles of major statistical concepts, including parameter estimation, confidence intervals, hypothesis testing, asymptotic analysis, Bayesian inference, and elements of decision theory.

Print ISBN: 978-1-68250-399-7 | \$155 | 2017 | Hardcover

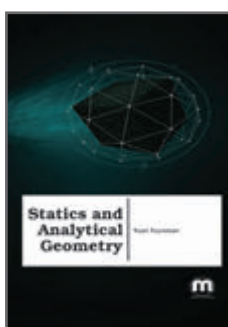


General Relativity

Editor: S.F. Richard

General relativity is a scientific theory describing how matter, energy, time, and space interact. General relativity generalizes special relativity and Newton's law of universal gravitation, providing a unified description of gravity as a geometric property of space and time, or space time. This book includes full discussions of many problem related to general relativity.

Print ISBN: 978-1-68250-400-0 | \$155 | 2017 | Hardcover

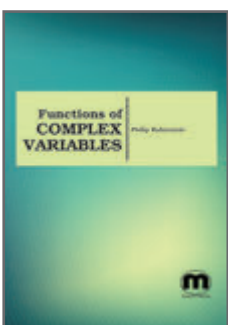


Statics and Analytical Geometry

Editor: Yaan Feynman

Geometry is a branch of mathematics concerned with questions of shape, size, relative position of figures, and the properties of space. Analytic geometry is the study of geometry using a coordinate system. This contrasts with synthetic geometry. Analytic geometry is widely used in physics and engineering, and is the foundation of most modern fields of geometry, including algebraic, differential, discrete and computational geometry. This book covers the coordinate system, planes and lines, spheres, homogeneous coordinates, general equations, quadric in Cartesian coordinates, and intersection of quadrics.

Print ISBN: 978-1-68250-401-7 | \$155 | 2017 | Hardcover

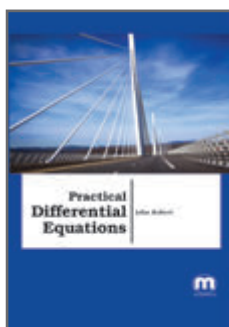


Functions of Complex Variables

Editor: Philip Rubinstein

Complex analysis, traditionally known as the theory of functions of a complex variable, is the branch of mathematical analysis that investigates functions of complex numbers. It is useful in many branches of mathematics, including algebraic geometry, number theory, analytic combinatorics, applied mathematics; as well as in physics, including hydrodynamics and thermodynamics and also in engineering fields such as nuclear, aerospace, mechanical, and electrical engineering. This book focuses on functions of complex variables.

Print ISBN: 978-1-68250-402-4 | \$155 | 2017 | Hardcover



Practical Differential Equations

Editor: John Robert

A differential equation is a mathematical equation that relates some function with its derivatives. In applications, the functions usually represent physical quantities, the derivatives represent their rates of change, and the equation defines a relationship between the two. This book begins by introducing the basic concepts of differential equations, focusing on the analytical, graphical, and numerical aspects of first-order equations, including slope fields and phase lines.

Print ISBN: 978-1-68250-403-1 | \$155 | 2017 | Hardcover



Hydrodynamic and Hydromagnetic Stability

Editor: Morgan Coleman

Hydrodynamic stability is the field which analyses the stability and the onset of instability of fluid flows. The study of hydrodynamic stability aims to find out if a given flow is stable or unstable, and if so, how these instabilities will cause the development of turbulence. The stability of magnetized plasmas finds application in various astrophysical situations, such as magnetic stars, solar phenomena, interstellar matter, and plasma confinement in the laboratory for realization of controlled thermonuclear fusion. This book deals with hydrodynamic and hydromagnetic stability.

Print ISBN: 978-1-68250-404-8 | \$150 | 2017 | Hardcover



Advanced Biophysics

Editor: Lucas Bryant

Biophysics is an interdisciplinary science that applies the approaches and methods of physics to study biological systems. Biophysics covers all scales of biological organization, from molecular to organismic and populations. This book begins by explaining molecular and ionic interactions, movements, excitation, and energy transfer, and the self-organization of supramolecular structures.

Print ISBN: 978-1-68250-405-5 | \$150 | 2017 | Hardcover

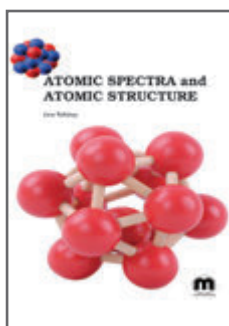


Classical and General Mechanics

Editor: D.K. Kemron

Mechanics is an area of science concerned with the behavior of physical bodies when subjected to forces or displacements, and the subsequent effects of the bodies on their environment. Classical mechanics is one of the two major sub-fields of mechanics, along with quantum mechanics. Classical mechanics is concerned with the set of physical laws describing the motion of bodies under the influence of a system of forces. This book covers all the standard introductory topics in classical mechanics, including Newton's laws, oscillations, energy, momentum, angular momentum, planetary motion, and special relativity.

Print ISBN: 978-1-68250-406-2 | \$150 | 2017 | Hardcover

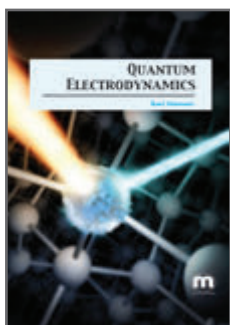


Atomic Spectra and Atomic Structure

Editor: Leo Tolstoy

Atomic spectroscopy is the study of the electromagnetic radiation absorbed and emitted by atoms. Atoms are made up of particles called protons, neutrons, and electrons, which are responsible for the mass and charge of atoms. Atomic structure is the concept of an atom as a central positively charged nucleus consisting of protons and neutrons surrounded by a number of electrons. This book presents the fundamentals of atomic spectra and atomic structure.

Print ISBN: 978-1-68250-407-9 | \$150 | 2017 | Hardcover

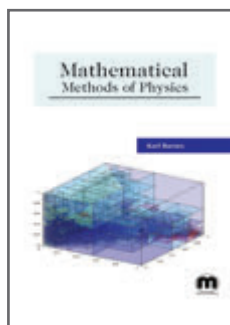


Quantum Electrodynamics

Editor: Kurt Hamsun

Quantum electrodynamics (QED) is the relativistic quantum field theory of electrodynamics. In essence, it describes how light and matter interact and is the first theory where full agreement between quantum mechanics and special relativity is achieved. This book describes the quantum properties and mechanics associated with the interaction of light with matter.

Print ISBN: 978-1-68250-408-6 | \$150 | 2017 | Hardcover

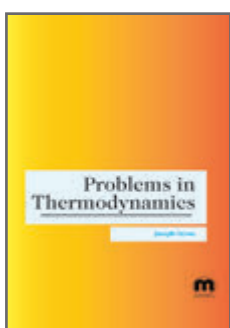


Mathematical Methods of Physics

Editor: Karl Barnes

Physics is the natural science that involves the study of matter and its motion through space and time, along with related concepts such as energy and force. It applies scientific methodologies to understand the most fundamental principles of nature: matter and energy, and how they interact. This book presents the common techniques of applied mathematics that are often used in theoretical physics.

Print ISBN: 978-1-68250-409-3 | \$150 | 2017 | Hardcover



Problems in Thermodynamics

Editor: Joseph Verne

Thermodynamics is the branch of science concerned with heat and temperature and their relation to energy and work. It states that the behavior of these quantities is governed by the four laws of thermodynamics, irrespective of the composition or specific properties of the material or system in question. The laws of thermodynamics are explained in terms of microscopic constituents by statistical mechanics. Thermodynamics applies to a wide variety of topics in science and engineering, especially physical chemistry, chemical engineering and mechanical engineering. This book deals with the problems in thermodynamics.

Print ISBN: 978-1-68250-410-9 | \$150 | 2017 | Hardcover

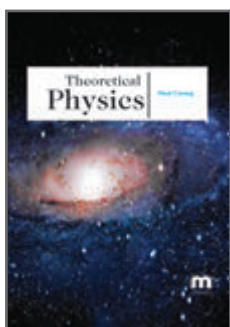


Problems in Electricity and Magnetism

Editor: S. P. Khan

Electricity is the presence and flow of electric charge. Its best-known form is the flow of electrons through conductors such as copper wires. Magnetism is a class of physical phenomena that are mediated by magnetic fields. Electric currents and the magnetic moments of elementary particles give rise to a magnetic field, which acts on other currents and magnetic moments. This book provides a thorough understanding of the concept of all types of numerical problems in electricity and magnetism. It also covers all the standard introductory topics, such as electrostatics, magnetism, circuits, electromagnetic waves, and electric and magnetic fields in matter.

Print ISBN: 978-1-68250-411-6 | \$150 | 2017 | Hardcover



Theoretical Physics

Editor: Paul Georg

Theoretical physics is a branch of physics which employs mathematical models and abstractions of physical objects and systems to rationalize, explain and predict natural phenomena. This is in contrast to experimental physics, which uses experimental tools to probe these phenomena. Many disciplines within physics fall under the umbrella of theoretical physics because they involve the design of formulas which may not be able to be empirically tested. This book presents the fundamentals of theoretical physics.

Print ISBN: 978-1-68250-412-3 | \$150 | 2017 | Hardcover

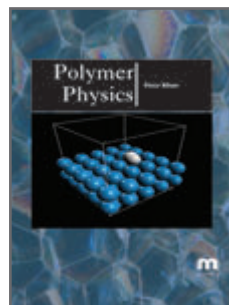


Semiconductor Physics

Editor: Dr. Eqbal Husan

Semiconductor is a substance, usually a solid chemical element or compound that can conduct electricity under some conditions but not others, making it a good medium for the control of electrical current. Its conductance varies depending on the current or voltage applied to a control electrode, or on the intensity of irradiation by infrared, visible light, ultraviolet, or X rays. This book provides a basis for understanding the characteristics, operation, and limitations of semiconductor devices.

Print ISBN: 978-1-68250-413-0 | \$150 | 2017 | Hardcover

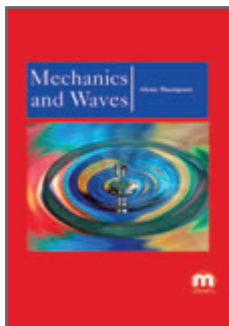


Polymer Physics

Editor: Firoz Khan

Polymer physics is the field of physics that studies polymers, their fluctuations, mechanical properties, as well as the kinetics of reactions involving degradation and polymerization of polymers and monomers respectively. This book deals with modern theory of polymer physics. It describes basic concepts and methods to discuss the statistical properties of the assembly of chain-like molecules.

Print ISBN: 978-1-68250-414-7 | \$150 | 2017 | Hardcover



Mechanics and Waves

Editor: Alene Thompson

Mechanics is an area of science concerned with the behavior of physical bodies when subjected to forces or displacements, and the subsequent effects of the bodies on their environment. A wave is an oscillation accompanied by a transfer of energy that travels through medium. Frequency refers to the addition of time. This book presents the introductory concepts of mechanics and waves.

Print ISBN: 978-1-68250-415-4 | \$150 | 2017 | Hardcover

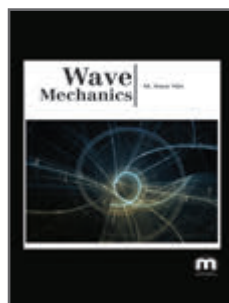


Applied Mechanics

Editor: John Thomas

Applied mechanics is a branch of the physical sciences and the practical application of mechanics. It describes the response of bodies or systems of bodies to external forces. Applied mechanics is useful in formulating new ideas and theories, discovering and interpreting phenomena, and developing experimental and computational tools. This book presents the mathematical foundations of applied mechanics.

Print ISBN: 978-1-68250-416-1 | \$150 | 2017 | Hardcover

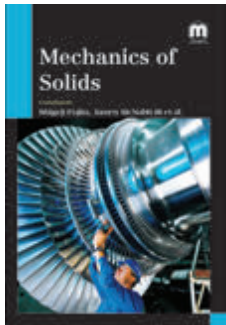


Wave Mechanics

Editor: M. Anne Nin

Mechanics is an area of science concerned with the behavior of physical bodies when subjected to forces or displacements, and the subsequent effects of the bodies on their environment. Wave mechanics is the branch of theoretical physics that mathematically represents subatomic particles as waves in fields, as in the theory of quantum electrodynamics. This book presents the basics of wave mechanics.

Print ISBN: 978-1-68250-418-5 | \$150 | 2017 | Hardcover

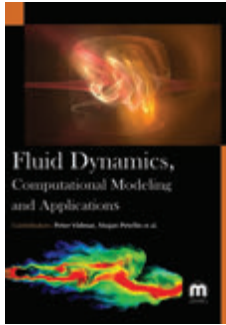


Mechanics of Solids

Contributors: Shigeji Fujita, James McNabb III et al.

This book discusses about the mechanics of solids, statics, the strength of materials, and elasticity theory. Solid mechanics is fundamental for civil, aerospace, nuclear, and mechanical engineering, for geology, and for many branches of physics such as materials science. It has specific applications in many other areas, such as understanding the anatomy of living beings, and the design of dental prostheses and surgical implants. Solid mechanics extensively uses tensors to describe stresses, strains, and the relationship between them.

Print ISBN: 9781682503102 | \$170 | Pub Year: 2016 | Hardcover



Fluid Dynamics, Computational Modeling and Applications

Contributors: Peter Vidmar, Stojan Petelin et al.

With the appearance of powerful and fast computers, new possibilities for replacing time-consuming model testing and field-testing have arisen. This involves solving the differential equations describing fluid motion, using either a finite volume or sometimes, but more rarely due to larger amount of CPU time required, a finite element method. These methods applied for the solution of the fluid equations of motion are named computation fluid dynamics or simply CFD. CFD essentially takes the momentum, heat and mass balance equations, along with other models describing the equipment performance, and solves them to give information such as temperature profiles, velocity profiles and equipments size. Computational Fluid Dynamics (CFD) is becoming a critical part of the design process. CFD makes it possible to evaluate velocity, pressure, temperature, and species concentration of fluid flow throughout a solution domain, allowing the design to be optimized prior to the prototype phase. This book provides a comprehensive overview of computational fluid dynamics and applications. Fluid Dynamics, Computational Modeling and Applications is intended to serve as a general reference for scientists, engineers, and graduate students.

Print ISBN: 9781682502563 | \$170 | Pub Year: 2016 | Hardcover

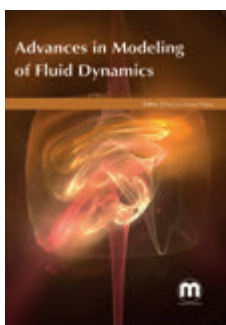


Atomic Structure

Contributors: Recep Zan, Quentin M. Ramasse et al.

An atom is the smallest constituent unit of ordinary matter that has the properties of a chemical element. Atomic structure is the positively charged nucleus and the negatively charged electrons circling around it, within an atom. This book focuses on the structure and there importance in the atoms.

Print ISBN: 9781682501603 | \$170 | Pub Year: 2016 | Hardcover

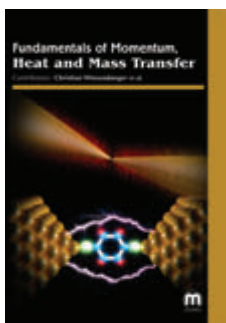


ADVANCES IN MODELING OF FLUID DYNAMICS

Editor: Ping Lu, Manoj Thapa

Fluid dynamics is concerned with the movement of liquids and gases. Fluid dynamics is one of two branches of fluid mechanics, which is the study of fluids and how forces affect them. The movement of liquids and gases is generally referred to as "flow," a concept that describes how fluids behave and how they interact with their surrounding environment. This book, a useful resource to scientists and engineers who are interested in fundamentals and applications of fluid dynamics, gives significant advancements and applications in fluid dynamics modeling with focus on biomedical, bioengineering, chemical, astronautics, and automotive etc.

Print ISBN: 9781682500163 | \$180 | Pub Year: 2016 | Hardcover

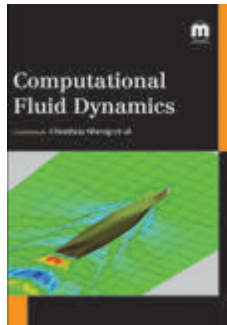


Fundamentals of Momentum, Heat and Mass Transfer

Contributors: Christian Wiesendanger et al.

Heat transfer is the exchange of thermal energy between physical systems, depending on the temperature and pressure, by dissipating heat. Whereas Mass transfer is the net movement of mass from one location, usually meaning stream, phase, fraction or component, to another and also it is used by different scientific disciplines for different processes and mechanisms. This book covers a number of topics in heat and mass transfer fundamental momentum processes for a variety of industrial applications.

Print ISBN: 9781682502242 | \$170 | Pub Year: 2016 | Hardcover

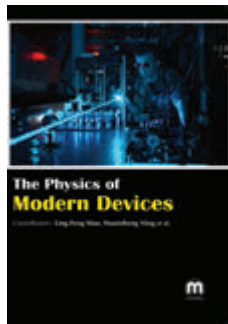


Computational Fluid Dynamics

Contributors: Chunhua Sheng et al.

Computational fluid dynamics is a branch of fluid mechanics that uses numerical analysis and algorithms to solve and analyze problems that involve fluid flows. Computers are used to perform the calculations required to simulate the interaction of liquids and gases with surfaces defined by boundary conditions. Computational Fluid Dynamics covers tools and techniques across all disciplines in which fluid flow plays a role.

Print ISBN: 9781682503089 | \$170 | Pub Year: 2016 | Hardcover

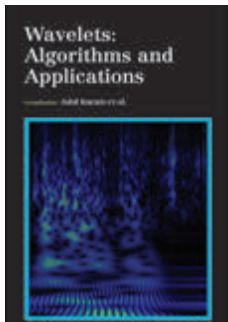


The Physics of Modern Devices

Contributors: Ling-Feng Mao, Huansheng Ning et al.

In physics, it is often needed to understand the basic concepts and limitations behind various technologies, which can be obtained from understanding the physics of modern devices. Exploring the physical principles underlying a number of modern devices and future devices, this book boosts understanding and appreciation of modern device physics from all angles.

Print ISBN: 9781682502310 | \$170 | Pub Year: 2016 | Hardcover



Wavelets: Algorithms and Applications

Contributors: Jalal Karam et al.

Wavelets are mathematical functions that cut up data into different frequency components, and then study each component with a resolution matched to its scale. They have advantages over traditional Fourier methods in analyzing physical situations where the signal contains discontinuities and sharp spikes. Wavelet analysis has become a tool of choice in fields ranging from image compression, to signal detection and analysis in electrical engineering and geophysics, to analysis of turbulent or intermittent processes. This book envisages on wavelets analysis and its applications.

Print ISBN: 9781682503119 | \$170 | Pub Year: 2016 | Hardcover



Applications of Fourier Transform

Contributors: Daechul Park, Moon Ho Lee et al.

The term Fourier transform refers to both the frequency domain representation and the mathematical operation that associates the frequency domain representation to a function of time. The Fourier transform is not limited to functions of time, but in order to have a unified language, the domain of the original function is commonly referred to as the time domain. The Fourier transform has many applications, in fact any field of physical science that uses sinusoidal signals, such as engineering, physics, applied mathematics, and chemistry, will make use of Fourier series and Fourier transforms. This book discusses recent advances and applications of Fourier transform.

Print ISBN: 9781682500224 | \$ 170 | Pub Year: 2016 | Hardcover



Graph Theory: New Frontiers

Contributors: Vincent Guillemot, Arthur Tenenhaus et al.

Graph theory is the study of points and lines. In particular, it involves the ways in which sets of points, called vertices, can be connected by lines or arcs, called edges. Graphs in this context differ from the more familiar coordinate plots that portray mathematical relations and functions. Nowadays, graph theory is an important analysis tool in mathematics and computer science. Because of the inherent simplicity of graph theory, it can be used to model many different physical and abstract systems such as transportation and communication networks, models for business administration, political science, and psychology and so on. The aim of this book is to present the latest state and development tendencies of graph theory.

Print ISBN: 9781682500248 | \$ 180 | Pub Year: 2016 | Hardcover

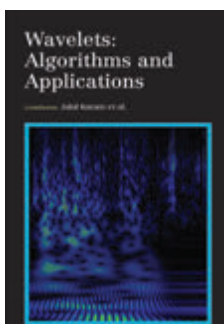


Mathematical Biology

Contributors: Mark T. Mc Auley, Kathleen M. Mooney et al.

Mathematical biology is an interdisciplinary field with a range of applications in biology, biotechnology, and medicine. The field may be referred to as mathematical biology or biomathematics to stress the mathematical side, or as theoretical biology to stress the biological side. Mathematical biology aims at the mathematical representation, treatment and modeling of biological processes, using a variety of applied mathematical techniques and tools. It has both theoretical and practical applications in biological, biomedical and biotechnology research.

Print ISBN: 9781682503034 | \$ 170 | Pub Year: 2016 | Hardcover

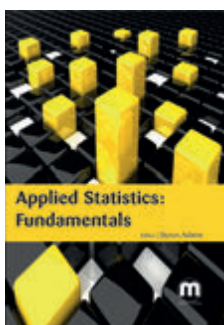


Wavelets: Algorithms and Applications

Contributors: Jalal Karam et al.

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Print ISBN: 9781682503119 | \$ 170 | Pub Year: 2016 | Hardcover

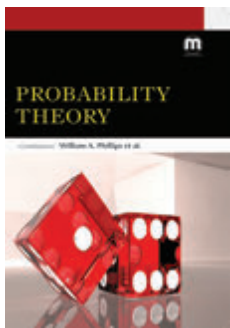


Applied Statistics: Fundamentals

Editor: Byron Adams

In the 21st century and technology age, the data is abundant in every aspects of life. Statistics is not an exception since it deals with data all. Applied statistics is a compendium, an elementary introduction to the growing field of statistics. Applied statisticians apply their knowledge of statistical methods to a variety of subject areas, such as biology, economics, engineering, medicine, public health, psychology, marketing, and education. Many applications cannot occur without use of statistical techniques. This book provides comprehensive and exhaustive fundamentals of statistics applied to numerous fields.

Print ISBN: 9781682500385 | \$ 160 | Pub Year: 2016 | Hardcover

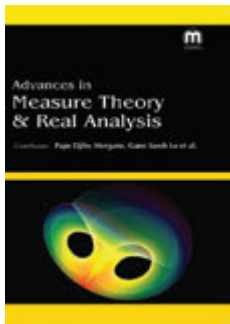


Probability Theory

Contributors: William A. Phillips et al.

Probability theory, a branch of mathematics concerned with the analysis of random phenomena. The outcome of a random event cannot be determined before it occurs, but it may be any one of several possible outcomes. The actual outcome is considered to be determined by chance. As a mathematical foundation for statistics, probability theory is essential to many human activities that involve quantitative analysis of large sets of data. Methods of probability theory also apply to descriptions of complex systems given only partial knowledge of their state, as in statistical mechanics. This book is concerned with probability theory and all of its conventional mathematics in a wider context.

Print ISBN: 9781682501047 | \$ 170 | Pub Year: 2016 | Hardcover

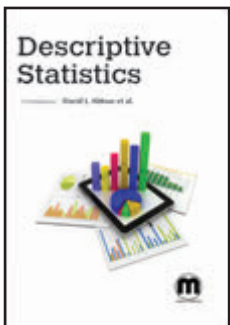


Advances in Measure Theory & Real Analysis

Contributors: Pape Djiby Mergane, Gane Samb Lo et al.

In mathematical analysis, a measure on a set is a systematic way to assign a number to each suitable subset of that set, intuitively interpreted as its size. In this sense, a measure is a generalization of the concepts of length, area, and volume. Technically, a measure is a function that assigns a non-negative real number. Real analysis deals with the real numbers and real-valued functions of a real variable. Measure theory was developed in successive stages during the late 19th and early 20th centuries by Émile Borel, Henri Lebesgue, Johann Radon and Maurice Fréchet, among others. The main applications of measures are in the foundations of the Lebesgue integral, in Andrey Kolmogorov's axiomatisation of probability theory and in ergodic theory. This book presents recent advances in measure theory and integration of measure theory and real analysis.

Print ISBN: 9781682500590 | \$ 170 | Pub Year: 2016 | Hardcover

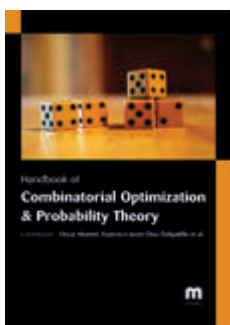


Descriptive Statistics

Contributors: David J. Aldous et al.

Descriptive statistics refers the analysis of data that helps describe, show or summarize data in a meaningful way. Descriptive statistics do not, however, allow us to make conclusions beyond the data we have analyzed or reach conclusions regarding any hypotheses we might have made. They are simply a way to describe our data. Descriptive statistics are very important because if we simply presented our raw data it would be hard to visualize what the data was showing, especially if there was a lot of it. Descriptive statistics therefore enables us to present the data in a more meaningful way, which allows simpler interpretation of the data. This book allows common types of descriptive statistics and why they are important for understanding psychological research.

Print ISBN: 9781682501054 | \$ 160 | Pub Year: 2016 | Hardcover

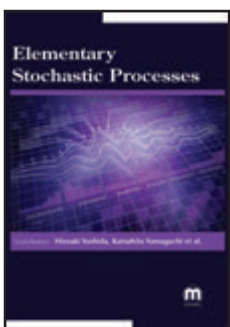


Handbook of Combinatorial Optimization & Probability Theory

Contributors: Oscar Montiel, Francisco Javier Díaz Delgadillo et al.

Combinatorial optimization is a subset of mathematical optimization that is related to operations research, algorithm theory, and computational complexity theory. It has important applications in several fields, including artificial intelligence, machine learning, mathematics, auction theory, and software engineering. Combinatorial optimization is a lively field of applied mathematics combining techniques from combinatorics linear programming and the theory of algorithms to solve optimization problems over discrete structures. This book provides an introduction to the state of the art of the probability theory that is most directly applicable to combinatorial optimization.

Print ISBN: 9781682500651 | \$ 190 | Pub Year: 2016 | Hardcover

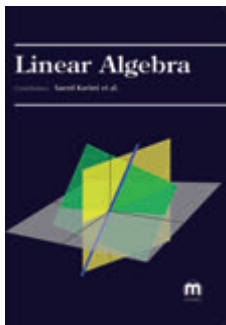


Elementary Stochastic Processes

Contributors: Hiroaki Yoshida, Katsuhito Yamaguchi et al.

In probability theory, a stochastic process, or often random process, is a collection of random variables, representing the evolution of some system of random values over time. This is the probabilistic counterpart to a deterministic process. Instead of describing a process which can only evolve in one way, in a stochastic or random process there is some indeterminacy: even if the initial condition is known, there are several directions in which the process may evolve. This book emphasis on the theory of stochastic processes in an elementary manner.

Print ISBN: 9781682501078 | \$ 170 | Pub Year: 2016 | Hardcover

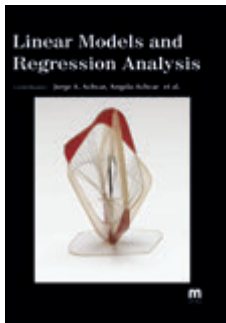


Linear Algebra

Contributors: Saeed Karimi et al.

Linear algebra is the branch of mathematics concerning vector spaces and linear mappings between such spaces. It includes the study of lines, planes, and subspaces, but is also concerned with properties common to all vector spaces. Linear algebra implies two dimensional reasoning, however, the concepts covered in linear algebra provide the basis for multi-dimensional representations of mathematical reasoning. Matrices, vectors, vector spaces, transformations, eigenvectors/ values all help us to visualize and understand multidimensional concepts. This book focuses on new insights to matrix theory and finite dimensional linear algebra in their algebraic, arithmetic, combinatorial, geometric, or numerical aspects.

Print ISBN: 9781682501092 | \$ 160 | Pub Year: 2016 | Hardcover



Linear Models and Regression Analysis

Contributors: Jorge A. Achcar, Angela Achcar et al.

In statistics, the term linear model is used in different ways according to the context. The most common occurrence is in connection with regression models and the term is often taken as synonymous with linear regression model. However, the term is also used in time series analysis with a different meaning. In each case, the designation "linear" is used to identify a subclass of models for which substantial reduction in the complexity of the related statistical theory is possible. Linear models play a central part in modern statistical methods. On the one hand, these models are able to approximate a large amount of metric data structures in their entire range of definition or at least piecewise. Regression analysis is a statistical tool for the investigation of relationships between variables. This book details on the approaches of linear models and regression analysis and their applications.

Print ISBN: 9781682501122 | \$ 170 | Pub Year: 2016 | Hardcover

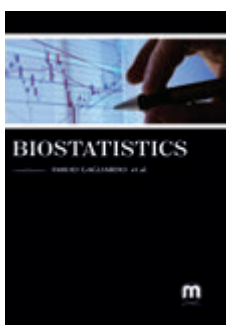


Distribution Theory

Contributors: Hendrik Jager et al.

Distributions are objects that generalize the classical notion of functions in mathematical analysis. Distributions make it possible to differentiate functions whose derivatives do not exist in the classical sense. In particular, any locally integrable function has a distributional derivative. Distributions are widely used in the theory of partial differential equations, where it may be easier to establish the existence of distributional solutions than classical solutions, or appropriate classical solutions may not exist. Distributions are also important in physics and engineering where many problems naturally lead to differential equations whose solutions or initial conditions are distributions. This book is an introductory course to the very important theory of distributions, as well as its applications in the resolution of partial differential equations.

Print ISBN: 9781682501108 | \$ 170 | Pub Year: 2016 | Hardcover



Biostatistics

Contributors: Emilio Gagliardo et al.

Biostatistics, the branch of statistics, is responsible for the apposite interpretation of scientific data created in the biology, public health and other health sciences. In these sciences, subjects show substantial variation in their response to stimuli. This variation may be due to different treatments or it may be due to measurement error, or other characteristics of the specific subjects. Generally, Biostatistics is associated with separating these different sources of variation. It finds to differentiate between correlation and causation, and to make usable implications from known samples about the populations from which they were pinched.

Print ISBN: 9781682501153 | \$ 170 | Pub Year: 2016 | Hardcover

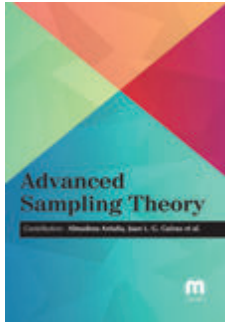


Statistical Computing

Contributors: Kyriakos Patsias, Mona Rahimi et al.

Computational statistics, or statistical computing, often used interchangeably, is the interface between statistics and computer science. It is the area of computational science specific to the mathematical science of statistics. This area is also developing rapidly, leading to calls that a broader concept of computing should be taught as part of general statistical education. This book covers the interface between the statistical and computing sciences.

Print ISBN: 9781682501115 | \$ 170 | Pub Year: 2016 | Hardcover

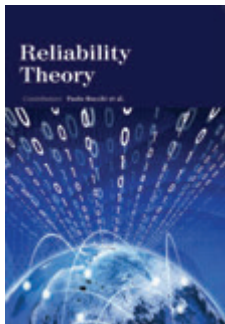


Advanced Sampling Theory

Contributors: Almudena Antuña, Juan L. G. Guirao et al.

Sampling is a method of studying from a few selected items, instead of the entire big number of units. The small selection is called sample. The large number of items of particular characteristic is called population. The purpose of all the sampling techniques is to give the equal chance of any item to be selected without bias. Sampling theorems are Nyquist-Shannon sampling theorem, Statistical sampling and Fourier sampling. This book envisages on the proof of a number of theorems used in real life examples.

Print ISBN: 9781682501160 | \$ 180 | Pub Year: 2016 | Hardcover



Reliability Theory

Contributors: Paolo Rocchi et al.

Reliability theory describes the probability of a system completing its expected function during an interval of time. It is the basis of reliability engineering, which is an area of study focused on optimizing the reliability, or probability of successful functioning, of systems, such as airplanes, linear accelerators, and any other product. It developed apart from the mainstream of probability and statistics. It was originally a tool to help nineteenth century maritime insurance and life insurance companies compute fair-value rates to charge their customers. This book details on the reliability theory and its real life examples.

Print ISBN: 9781682501177 | \$ 170 | Pub Year: 2016 | Hardcover

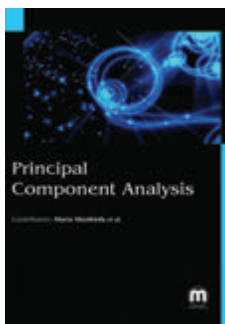


Time Series Analysis

Contributors: Robert Davies, Tim Coole et al.

Time series analysis comprises methods for analyzing time series data in order to extract meaningful statistics and other characteristics of the data and also distinct from spatial data analysis where the observations typically relate to geographical locations. It may be divided into two classes: frequency-domain methods and time-domain methods. This book introduces the reader to newer developments and more diverse important models and methods for time series analysis.

Print ISBN: 9781682501207 | \$ 170 | Pub Year: 2016 | Hardcover

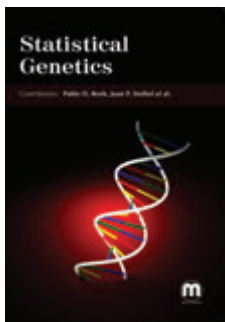


Principal Component Analysis

Contributors: Maria Monfreda et al.

Principal component analysis is a statistical procedure that uses an orthogonal transformation to convert a set of observations of possibly correlated variables into a set of values of linearly uncorrelated variables called principal components. This book reduces to the solution of an eigenvalue eigenvector problem for a positive semi definite symmetric matrix.

Print ISBN: 9781682502556 | \$ 170 | Pub Year: 2016 | Hardcover



Statistical Genetics

Contributors: Pablo D. Reeb, Juan P. Steibel et al.

A scientific field focused with the development and application of statistical methods for drawing inferences from genetic data is termed as statistical genetics. The term is most commonly used in the context of human genetics. Statistical genetics is closely associated molecular biology, clinical and bioinformatics. Statistical genetics is a kind of computational biology. Statistical Genetics envisages on the methods in linkage analysis, allelic association tests, gene statement array data analysis, sequence analysis, comparative genomics, phylogenetic tree reconstruction, etc.

Print ISBN: 9781682501184 | \$ 170 | Pub Year: 2016 | Hardcover

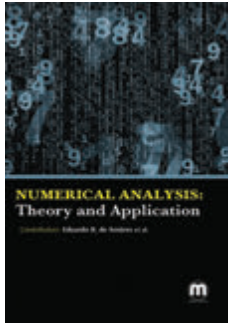


Statistical Ecology

Contributors: Nadja Stumberg, Marius Hauglin et al.

Statistical ecology as a subject over the past decade and that generates the patterns of ecological processes modeling takes off. Statistical ecology covering a wide range of disciplines, explains the formulae, techniques, and methods that used in field ecology and also focuses on ecological data for single-species populations, from sampling through modeling. This book will acquire a strong foundation in the statistical methods of modern ecological research.

Print ISBN: 9781682501191 | \$ 170 | Pub Year: 2016 | Hardcover

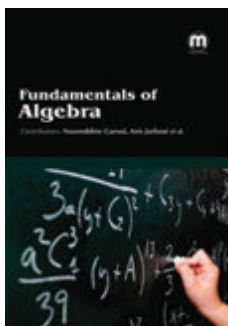


Numerical Analysis: Theory and Application

Contributors: Eduardo B. de Amôres et al.

Numerical analysis is an area of mathematics and computer science that creates, analyzes, and implements algorithms for obtaining numerical solutions to problems involving continuous variables. This book is intended to the basic techniques for the efficient numerical solution of problems in science and engineering. The book focuses on introducing theoretical approaches of numerical analysis as well as applications of various numerical methods to either study or solving numerous theoretical and engineering problems.

Print ISBN: 9781682502594 | \$ 170 | Pub Year: 2016 | Hardcover

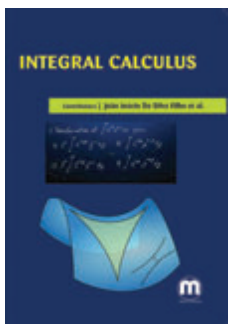


Fundamentals of Algebra

Contributors: Nassreddine Garoui, Anis Jarboui et al.

Algebra is a beautiful and important area of study with unlimited applications. Algebra is a branch of mathematics dealing with symbols and the rules for manipulating those symbols. Algebra is one of the broad parts of mathematics, together with number theory, geometry and analysis. In its most general form, algebra is the study of mathematical symbols and the rules for manipulating these symbols; it is a unifying thread of almost all of mathematics. As such, it includes everything from elementary equation solving to the study of abstractions such as groups, rings, and fields. This book envisages on algebraic fundamentals and its applications.

Print ISBN: 9781682502761 | \$ 160 | Pub Year: 2016 | Hardcover



Integral Calculus

Contributors: João Inácio Da Silva Filho et al.

Integration is the algebraic method of finding the integral for a function at any point on the graph. Finding the integral of a function with respect to x means finding the area to the x axis from the curve. The integral is usually called the anti-derivative, because integrating is the reverse process of differentiating. Integral Calculus includes integrals and their inverse, differentials, derivatives, anti-derivatives, and approximating the area of curvilinear regions.

Print ISBN: 9781682502792 | \$ 160 | Pub Year: 2016 | Hardcover



Matrix and Linear Algebra

Contributors: Matsuo Sato et al.

Linear algebra is the branch of mathematics concerning vector spaces and linear mappings between such spaces. It includes the study of lines, planes, and subspaces, but is also concerned with properties common to all vector spaces. The set of points with coordinates that satisfy a linear equation forms a hyperplane in an n -dimensional space. The conditions under which a set of n hyperplanes intersect in a single point is an important focus of study in linear algebra. Such an investigation is initially motivated by a system of linear equations containing several unknowns. Such equations are naturally represented using the formalism of matrices and vectors. Linear algebra is significant to both pure and applied mathematics. This book summarizes some important results of linear and matrix algebra that are instrumental in deriving many statistical results.

Print ISBN: 9781682502778 | \$ 160 | Pub Year: 2016 | Hardcover

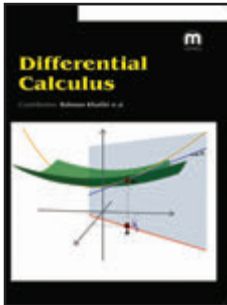


Ordinary Differential Equations

Contributors: Amnah S. Al-Johani et al.

An ordinary differential equation (ODE) is an equation that involves some ordinary derivatives of a function. The term “ordinary” is used in contrast with the term partial differential equation which may be with respect to more than one independent variable. Linear differential equations, which have solutions that can be added and multiplied by coefficients, are well-defined and understood, and exact closed-form solutions are obtained. This book through the topic of differential equations. The book provides information about the whole area of differential equations.

Print ISBN: 9781682502808 | \$ 160 | Pub Year: 2016 | Hardcover



Differential Calculus

Contributors: Rahman Khatibi et al.

Differential Calculus deals with the study of the rates at which quantities change. It is one of the two principle areas of calculus. It is one of the two traditional divisions of calculus, the other being integral calculus. The primary objects of study in differential calculus are the derivative of a function, related notions such as the differential, and their applications. The derivative of a function at a chosen input value describes the rate of change of the function near that input value. Differentiation has applications to nearly all quantitative disciplines.

Print ISBN: 9781682502785 | \$ 160 | Pub Year: 2016 | Hardcover

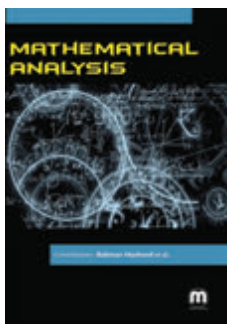


Elements of Coordinate Geometry

Contributors: Abdumauvlen S Berdyshev, Alberto Cabada et al.

Coordinate geometry (or analytic geometry) is the study of geometry using a coordinate system. This contrasts with synthetic geometry. Analytic geometry is widely used in physics and engineering, and is the foundation of most modern fields of geometry, including algebraic, differential, discrete and computational geometry. Usually the Cartesian coordinate system is applied to manipulate equations for planes, straight lines, and squares, often in two and sometimes in three dimensions. The book envisages the fundamentals and features of coordinate geometry.

Print ISBN: 9781682502815 | \$ 160 | Pub Year: 2016 | Hardcover

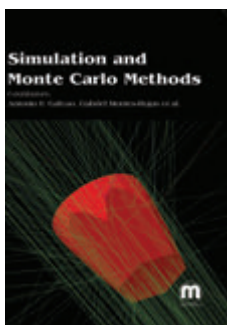


Mathematical Analysis

Contributors: Bahman Mashood et al.

Mathematical analysis is a branch of mathematics that studies continuous change and includes the theories of differentiation, integration, measure, limits, infinite series, and analytic functions. These theories are usually studied in the context of real and complex numbers and functions. Analysis evolved from calculus, which involves the elementary concepts and techniques of analysis. This book emphasizes on the mathematical treatment of questions arising in physics, chemistry, biology, and engineering.

Print ISBN: 9781682502839 | \$ 160 | Pub Year: 2016 | Hardcover

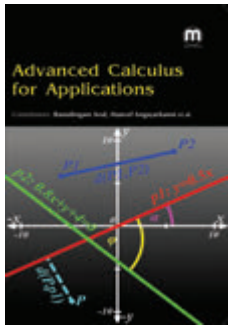


Simulation And Monte Carlo Methods

Contributors: Antonio F. Galvao, Gabriel Montes-Rojas et al.

Monte Carlo simulation is a computerized mathematical technique that allows people to account for risk in quantitative analysis and decision making. The technique is used by professionals in such widely disparate fields as finance, project management, energy, manufacturing, engineering, research and development, insurance, oil & gas, transportation, and the environment. Monte Carlo simulation furnishes the decision-maker with a range of possible outcomes and the probabilities they will occur for any choice of action. It shows the extreme possibilities—the outcomes of going for broke and for the most conservative decision—along with all possible consequences for middle-of-the-road decisions. The objective of this book is to introduce recent advances and applications of Monte Carlo Simulations in numerous fields.

Print ISBN: 9781682502884 | \$ 170 | Pub Year: 2016 | Hardcover

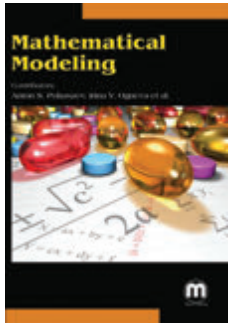


Advanced Calculus for Applications

Contributors: Ramalingam Arul, Manvel Angayarkanni et al.

Calculus is the mathematical study of change, in the same way that geometry is the study of shape and algebra is the study of operations and their application to solving equations. It has two major branches, differential calculus, and integral calculus; these two branches are related to each other by the fundamental theorem of calculus. Both branches make use of the fundamental notions of convergence of infinite sequences and infinite series to a well-defined limit. This book covers topics in advanced calculus, providing the foundation for partial differential equations and analysis.

Print ISBN: 9781682502846 | \$ 180 | Pub Year: 2016 | Hardcover

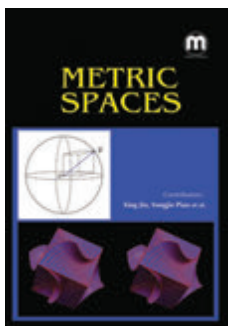


Mathematical Modeling

Contributors: Anton S. Pokusaev, Irina V. Ogneva et al.

A mathematical model is a description of a system using mathematical concepts and language. The process of developing a mathematical model is termed mathematical modeling. Mathematical models are used in the natural sciences and engineering disciplines, as well as in the social sciences. Mathematical models can take many forms, including but not limited to dynamical systems, statistical models, differential equations, or game theoretic models. These and other types of models can overlap, with a given model involving a variety of abstract structures. Mathematical Modelling focuses on topics related to the mathematical modelling of engineering and environmental processes, manufacturing, and industrial systems.

Print ISBN: 9781682502921 | \$ 170 | Pub Year: 2016 | Hardcover



Metric Spaces

Contributors: Xing Jin, Yongjie Piao et al.

A metric space, in mathematics, is a set for which distances between all members of the set are defined. Those distances, taken together, are called a metric on the set. The most familiar metric space is 3-dimensional Euclidean space. In fact, a "metric" is the generalization of the Euclidean metric arising from the four long-known properties of the Euclidean distance. The Euclidean metric defines the distance between two points as the length of the straight line segment connecting them. A metric on a space prompts topological properties like open and closed sets, which lead to the study of more abstract topological spaces. This book details the fundamentals of metric spaces.

Print ISBN: 9781682502860 | \$ 170 | Pub Year: 2016 | Hardcover

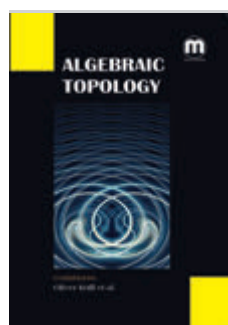


Advanced Discrete Mathematics

Contributors: Steven J. Tedford et al.

Discrete mathematics is the study of mathematical structures that are fundamentally discrete rather than continuous. In contrast to real numbers that have the property of varying smoothly, the objects studied in discrete mathematics – such as integers, graphs, and statements in logic – do not vary smoothly in this way, but have distinct, separated values. Discrete mathematics therefore excludes topics in continuous mathematics such as calculus and analysis. This book primarily deals with discrete dynamical systems, algorithms, combinatorics and Graph Theory.

Print ISBN: 9781682502945 | \$ 180 | Pub Year: 2016 | Hardcover

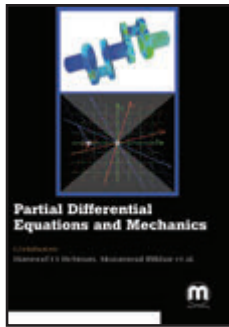


Algebraic Topology

Contributors: Oliver Knill et al.

Algebraic topology is a twentieth century field of mathematics that can trace its origins and connections back to the ancient beginnings of mathematics. Algebraic topology is a branch of mathematics that uses tools from abstract algebra to study topological spaces. The basic goal is to find algebraic invariants that classify topological spaces up to homeomorphism, though usually most classify up to homotopy equivalence. Although algebraic topology primarily uses algebra to study topological problems, using topology to solve algebraic problems is sometimes also possible. Algebraic topology allows for a convenient proof that any subgroup of a free group is again a free group. This book is an introduction to algebraic topology with rather broad coverage of the subject. The book emphasises on homology and cohomology theory, including cup products, Kunneth formulas, intersection pairings, and the Lefschetz fixed point theorem.

Print ISBN: 9781682502983 | \$ 170 | Pub Year: 2016 | Hardcover

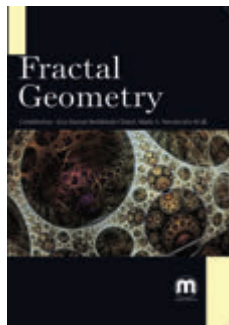


Partial Differential Equations and Mechanics

Contributors: Hamood Ur Rehman, Muzammal Iftikhar et al.

This book emphasizes on partial differential equations (PDEs) with important applications in mechanical and civil engineering, highlighting mathematical correctness, analysis, and verification of solutions. The book includes a discussion of relevant PDE applications, its derivation, and the formulation of consistent boundary conditions. It also focuses on certain recent progress of mathematical analysis and numerical computations related to the partial differential equations namely to fluid mechanics for engineering science.

Print ISBN: 9781682502969 | \$ 170 | Pub Year: 2016 | Hardcover



Fractal Geometry

Contributors: Arya Kumar Bedabrata Chand, María A. Navascués et al.

A fractal is a natural phenomenon or a mathematical set that demonstrate a repeating shape that displays at every scale. If the replication is exactly the same at every scale, it is called a self-similar pattern. Fractals can also be nearly the same at different levels. Fractals also includes the idea of a detailed pattern that repeats itself. The complexity of nature's shapes differs in kind, not merely degree, from that of the shapes of ordinary geometry, the geometry of fractal shapes. This book based on highly acclaimed earlier work has much broader and deeper coverage and more extensive illustrations.

Print ISBN: 9781682502990 | \$ 170 | Pub Year: 2016 | Hardcover



Advanced Functional Analysis

Contributors: Ana M. Aguilera, Manuel Escabias et al.

Functional analysis is a branch of mathematical analysis, the core of which is formed by the study of vector spaces endowed with some kind of limit-related structure and the linear operators acting upon these spaces and respecting these structures in a suitable sense. The historical roots of functional analysis lie in the study of spaces of functions and the formulation of properties of transformations of functions such as the Fourier transform as transformations defining continuous, unitary etc. operators between function spaces. Functional analysis plays an important role in the applied sciences as well as in mathematics itself. This book is intended to familiarize with the basic concepts, principles and methods of functional analysis and its applications, and they are intended for senior graduate students as well as for researchers and professionals.

Print ISBN: 9781682502976 | \$ 180 | Pub Year: 2016 | Hardcover

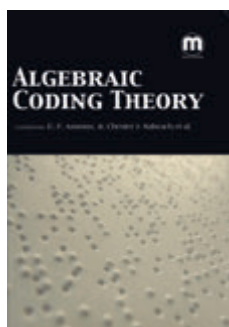


Fuzzy Sets and Their Applications

Contributors: Gabriel Burstein, Constantin Virgil Negoita et al.

This book covers systematic treatise of fuzzy set theory and of some of its applications. In mathematics, fuzzy sets are sets whose elements have degrees of membership. Fuzzy sets were introduced by Lotfi A. Zade and Dieter Klaua in 1965 as an extension of the classical notion of set. Applications of this theory can be found, but not limited to, in artificial intelligence, computer science, control engineering, decision theory, expert systems, logic, management science, operations research, pattern recognition, and robotics.

Print ISBN: 9781682503003 | \$ 170 | Pub Year: 2016 | Hardcover

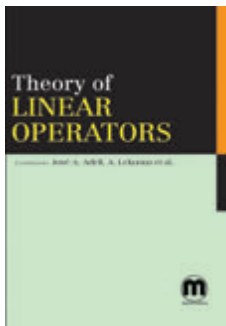


Algebraic Coding Theory

Contributors: E. F. Assmus, Jr, Chester J. Salwach et al.

Coding theory is the study of the properties of codes and their fitness for a specific application. Codes are used for data compression, cryptography, error-correction and more recently also for network coding. Codes are studied by various scientific disciplines such as information theory, electrical engineering, mathematics, linguistics, and computer science for the purpose of designing efficient and reliable data transmission methods. This typically involves the removal of redundancy and the correction of errors in the transmitted data. This book serves as a fairly terse introduction to the exciting field of coding theory.

Print ISBN: 9781682503010 | \$ 170 | Pub Year: 2016 | Hardcover

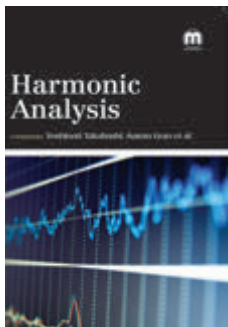


Theory of Linear Operators

Contributors: José A. Adell, A. Lekuona et al.

The purpose of this book is to provide the basics regarding the mathematical key features of unbounded operators to readers that are not familiar with such technical aspects. In functional analysis and related areas of mathematics, a continuous linear operator or continuous linear mapping is a continuous linear transformation between topological vector spaces. An operator between two normed spaces is a bounded linear operator if and only if it is a continuous linear operator. A continuous linear operator maps bounded sets into bounded sets. A linear functional is continuous if and only if its kernel is closed. Every linear function on a finite-dimensional space is continuous.

Print ISBN: 9781682503041 | \$ 170 | Pub Year: 2016 | Hardcover

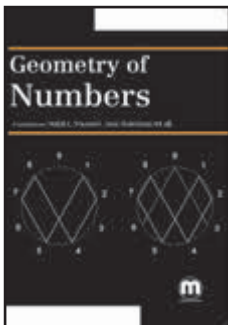


Harmonic Analysis

Contributors: Yoshinori Takahashi, Satoru Goto et al.

Harmonic Analysis is concerned with the representation of functions or signals as the superposition of basic waves, and the study of and generalization of the notions of Fourier series and Fourier transforms. Harmonic analysis is a dissimilar field including such branches as Fourier series, isospectral manifolds, and topological groups. Three of the fields that use harmonic analysis widely are signal processing, medical imaging, and quantum mechanics.

Print ISBN: 9781682503096 | \$ 170 | Pub Year: 2016 | Hardcover

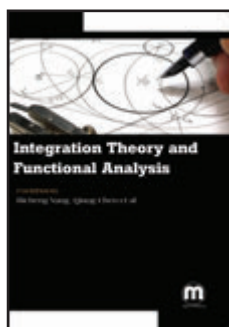


Geometry of Numbers

Contributors: Nabil L. Youssef, Amr Soleiman et al.

In number theory, the geometry of numbers studies convex bodies and integer vectors in n -dimensional space. The geometry of numbers was originated by Hermann Minkowski. The geometry of numbers has a close relationship with other fields of mathematics, especially functional analysis and Diophantine approximation, the problem of finding rational numbers that approximate an irrational quantity. The geometry of numbers deals with the use of geometric notions, especially convexity and lattice, to solve problems in number theory.

Print ISBN: 9781682503027 | \$ 160 | Pub Year: 2016 | Hardcover

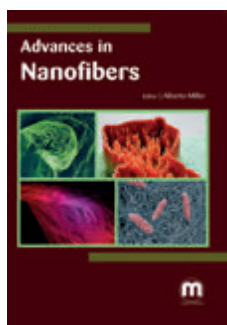


Integration Theory and Functional Analysis

Contributors: Bicheng Yang, Qiang Chen et al.

Integration Theory and Functional Analysis deals with the mathematical concepts of integration and functional analysis. The fundamentals of integration theory are discussed and introduces a variety of applications of the basic integration theory. This book provides an overview of the basic concepts of the theory of integration as a prelude to the study of probability, harmonic analysis, linear space theory, and other areas of mathematics.

Print ISBN: 9781682502952 | \$ 170 | Pub Year: 2016 | Hardcover

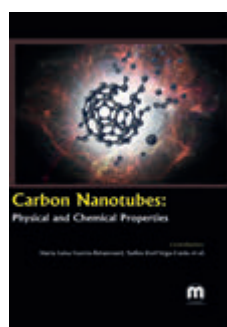


Advances In Nanofibers

Editor: Alberto Miller

Nanofibers are defined as fibers with diameters less than 100 nanometers. In the textile industry, this definition is often extended to include fibers as large as 1000 nm diameter. They can be produced by melt processing, interfacial polymerization, electrospinning, antisolvent-induced polymer precipitation and electrostatic spinning. Nanofibers have applications in medicine, including artificial organ components, tissue engineering, implant material, drug delivery, wound dressing, and medical textile materials. Book *Advances in Nanofibers* covers topics on developments within the Nanofibers field of study. This book summarizes the currently available techniques for nanofiber synthesis and discusses the use of nanofibers in tissue engineering and drug delivery applications.

Print ISBN: 9781682500057 | \$ 180 | Pub Year: 2016 | Hardcover



Carbon Nanotubes: Physical and Chemical Properties

Contributors: María Luisa García-Betancourt, Yadira Itzel Vega-Cantu et al.

Carbon nanotubes are polymers of pure carbon, and thus possess all of carbon's versatility, including the ability to form countless combinations and derivatives. In addition, carbon nanotubes are direct beneficiaries of the rich history and vast body of knowledge associated with carbon chemistry. Consequently, carbon nanotubes can be functionalized in countless ways using a variety of well-understood chemical reactions. In addition, the geometry of a nanotube allows for the formation of novel synthetic structures not possible with other carbon structures. Carbon nanotube, especially that aiming at industrial applications, is becoming more important. This book deals with recent topics regarding the physical, structural, chemical and electric properties on carbon nanotubes.

Print ISBN: 9781682500071 | \$ 180 | Pub Year: 2016 | Hardcover



Nanowires: Recent Advances

Editor: Alfred Rodriguez

A nanowire is a wire of dimensions of the order of a nanometer. Alternatively, nanowires can be defined as structures that have a lateral size constrained to tens of nanometers or less and an unconstrained longitudinal size. At these scales, quantum mechanical effects are important – hence such wires are also known as “quantum wires”. Many different types of nanowires exist, including metallic, semiconducting, and insulating. Molecular nanowires are composed of repeating molecular units either organic or inorganic.

Print ISBN: 9781682500088 | \$ 180 | Pub Year: 2016 | Hardcover



Nanocomposite Technology: Advances

Editor: Allen Anderson

Nanocomposite is a multiphase solid material where one of the phases has one, two or three dimensions of less than 100 nanometers (nm), or structures having nano-scale repeat distances between the different phases that make up the material. In the broadest sense this definition can include porous media, colloids, gels and copolymers, but is more usually taken to mean the solid combination of a bulk matrix and nano-dimensional phase(s) differing in properties due to dissimilarities in structure and chemistry. This book gives a broad overview of existing developments in nanocomposite technology research and a tremendous introduction to nanoelectronics, nanomaterial applications and bionanocomposites.

Print ISBN: 9781682500118 | \$ 180 | Pub Year: 2016 | Hardcover

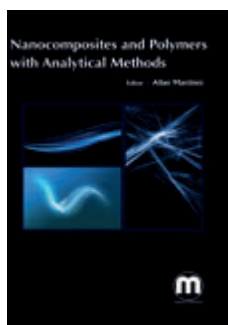


Nanofabrication Techniques and Applications: Recent

Editor: Alfredo Wilson

Nanofabrication is the design and manufacture of devices with dimensions measured in nanometers. Current technology mostly permits nanofabrication only in a two-dimensional sense. A major subset of current nanofabrication are the technologies that fall under the purview of nanolithography, which basically just means “nano-scale writing” and implies a 2-dimensional result. In this sense, even conventional photolithography used to make computer chips is technically nanofabrication, as feature sizes are measured in the hundreds of nanometers. However, “nanofabrication” tends to refer to newer and more cutting-edge approaches. This book summarizes the currently available techniques for nanofiber synthesis and discusses the use of nanofibers in tissue engineering and drug delivery applications.

Print ISBN: 9781682500095 | \$ 180 | Pub Year: 2016 | Hardcover

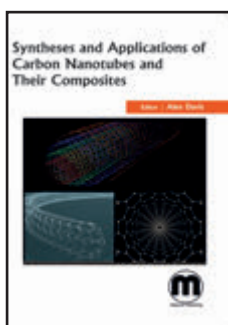


Nanocomposites and Polymers with Analytical Methods

Editor: Allan Martinez

Nanocomposites are composites in which at least one of the phases shows dimensions in the nanometer range. These are high performance materials that exhibit unusual property combinations and unique design possibilities and are thought of as the materials of the 21st century. With an estimated annual growth rate of about 25% and huge demand for engineering polymers, their potential is so promising that they are useful in several applications ranging from packaging to bio-medical. Almost all types of polymers, such as thermoplastics, thermosets and elastomers have been used to make polymer nanocomposites. A range of nanoreinforcements with different shapes have been used in making polymer nanocomposites. This book focuses on materials and analytic methods of polymer nanocomposites, as well as applications of polymers and nanocomposites in different fields.

Print ISBN: 9781682500101 | \$ 180 | Pub Year: 2016 | Hardcover

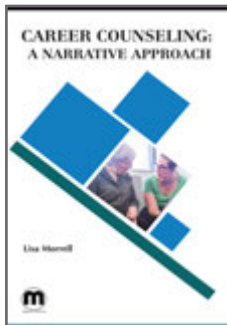


Synthesis And Applications of Carbon Nanotubes and Their Composites

Editor: Alex Davis

A carbon nanotube is a tube-shaped material, made of carbon, having a diameter measuring on the nanometer scale. A nanometer is one-billionth of a meter, or about one ten-thousandth of the thickness of a human hair. The graphite layer appears somewhat like a rolled-up chicken wire with a continuous unbroken hexagonal mesh and carbon molecules at the apexes of the hexagons. Carbon Nanotubes have many structures, differing in length, thickness, and in the type of helicity and number of layers. Although they are formed from essentially the same graphite sheet, their electrical characteristics differ depending on these variations, acting either as metals or as semiconductors. Innovative industrial applications of carbon nanotubes is increasing. This book covers recent research topics regarding syntheses techniques of carbon nanotubes and nanotube-based composites, and their applications.

Print ISBN: 9781682500064 | \$ 180 | Pub Year: 2016 | Hardcover

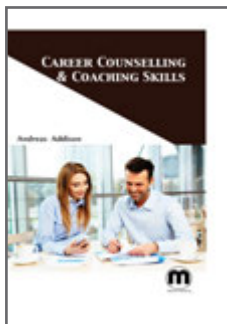


Career Counseling: A Narrative Approach

Editor: Lisa Morrell

Focusing on professional issues, work and well-being, life-span perspectives, and career theory and concepts, this book reviews the use of technology in career counseling from the early use of computers to the current use of the Internet. The book provides the professional, the public, and policymakers with the latest in career development theory, research and practice, focusing on the impact that theory and research have on practice.

Print ISBN: 978-1-68250-568-7 | \$145 | 2019 | Hardcover

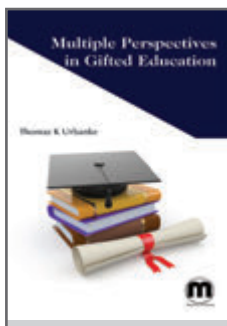


Career Counselling & Coaching Skills

Editor: Andreas Addison

This book reviews pertinent literature and shows that individuals must be proactive and be prepared to manage their own careers; intended to cover tools and resources available and the extent that individuals and human resource professionals can incorporate them into daily activities as they adjust to the demands of managing career transitions across and within organizations. This book will be of valuable for students or practitioners who are interested in developing their own practice, finding new and improved ways to do things and understanding the theories that supports the career change management.

Print ISBN: 978-1-68250-569-4 | \$145 | 2019 | Hardcover

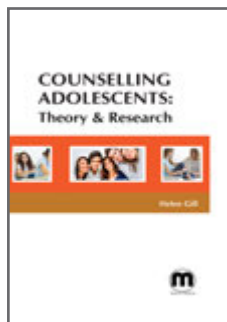


Multiple Perspectives in Gifted Education

Editor: Thomas K Urbanke

Whether gifted individuals have unique social and emotional needs has been a topic of much debate. This book is aimed to highlight advances in theories and research related to giftedness and gifted education, note the promising areas for additional research, and propose next steps for improving the quality and utility of empirical work in this important area. With the increasing interest and awareness about gifted education, this book will be useful for helping teachers, practitioners, and researchers understand how technology has been used in different areas of gifted programming, including learning and development, assessment, curriculum, learning environments, and professional development.

Print ISBN: 978-1-68250-570-0 | \$155 | 2019 | Hardcover

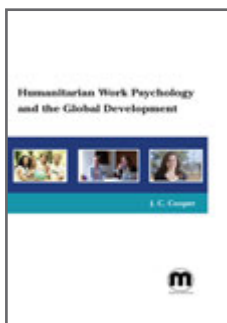


Counselling Adolescents: Theory & Research

Editor: Helen Gill

Counseling is one of the important modality of treatment for the adolescent-related problems because of their developmental stage and the special problems. This book brings together psychological therapy research and studies dealing with the development of adolescent appropriate behavior. This book is about psychotherapy and mental health counseling with children and adolescents. It focuses on theoretical views of psychological treatment of children and highlights major issues in the area contributed by renowned authors and researcher.

Print ISBN: 978-1-68250-571-7 | \$145 | 2019 | Hardcover

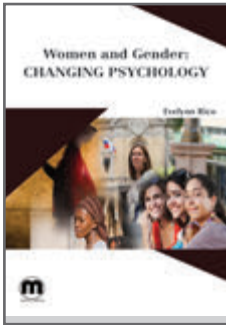


Humanitarian Work Psychology and the Global Development

Editor: J. C. Cooper

Humanitarian work psychology incorporates both the application of industrial and organizational psychology to humanitarian issues, and more broadly the development of a psychology that promotes humanitarianism work. Featuring contributions from humanitarian practitioners, health professionals, and social and political scientists, this book explores the question of ethics in modern humanitarian work, drawing on the lived experience of humanitarian. A practical guide to current technologies that can help relief and humanitarian aid workers succeed.

Print ISBN: 978-1-68250-572-4 | \$150 | 2019 | Hardcover

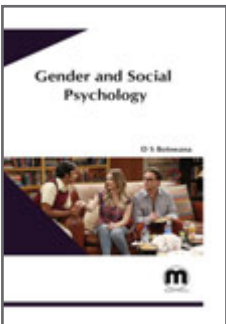


Women and Gender: Changing Psychology

Editor: Evelyn Rico

Psychology is generally assumed to be a science and, as such, outside of politics. Gender is increasingly understood as defining a system of power relations embedded in other power relations. This book deals with the psychology of women, the psychology of men, and gender differences while discussing psychological differences in personality, cognition, and behavior, as well as biologically based differences and how those differences impact the gender and psychology.

Print ISBN: 978-1-68250-573-1 | \$145 | 2019 | Hardcover

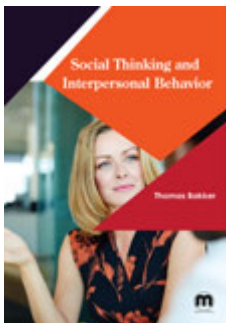


Gender and Social Psychology

Editor: D S Botswana

Taking together the writings from psychology, philosophy, psychoanalysis, history, women's studies, education and sociology that critique mainstream thinking and exemplify new ways of creating inquiry, the present book will examine multiple theories for gender differences in prejudice assessing the biological and social components to any effect. This book sheds new light on the challenges facing those who strive for gender parity. This ideal reference takes readers to the cutting edge of gender theory and research.

Print ISBN: 978-1-68250-574-8 | \$145 | 2019 | Hardcover

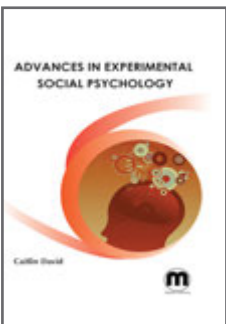


Social Thinking and Interpersonal Behavior

Editor: Thomas Bakker

This book addresses the personal determinants and mechanisms of human functioning from the perspective of social cognitive theory. Providing an integrated and organized foundation for students and practitioners seeking a comprehensive introduction to the field of relationship science, this book will review models of interpersonal communication and some of the research that they have motivated. With a focus in the context of social behavior, this book will also appeal to a wide range of researchers in the fields of sociology, anthropology, and evolutionary psychology.

Print ISBN: 978-1-68250-575-5 | \$145 | 2019 | Hardcover

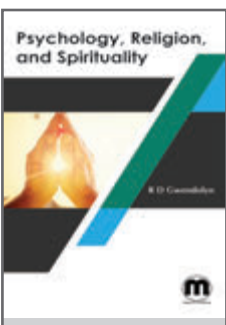


Advances in Experimental Social Psychology

Editor: Caitlin David

Applied social psychology needs middle-range theories that clearly articulate the reciprocal influences of macro-social structures and microsocial processes. Presenting state of the art in new research, theory, and practice in social psychology, this book covers studies on advances in the field of experimental social psychology. This book gives the essential principles and methods of investigation and the application of these principles to the problems of life and society.

Print ISBN: 978-1-68250-576-2 | \$145 | 2019 | Hardcover

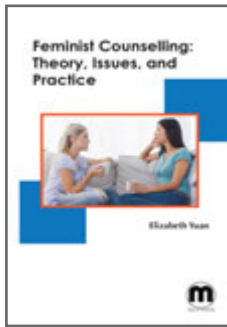


Psychology, Religion, and Spirituality

Editor: R D Gwendolyn

The psychology of religion might profitably draw ideas from the study of religion in those disciplines to produce enriched understandings. This book discusses progress in the psychology of religion by highlighting its rapid growth during the past two decades. This book provides comprehensive information to the important conversations that have developed out of these interchanges, giving an up-to-date overview and evaluation of what psychology tells us about religious beliefs, practices, and experiences.

Print ISBN: 978-1-68250-577-9 | \$150 | 2019 | Hardcover

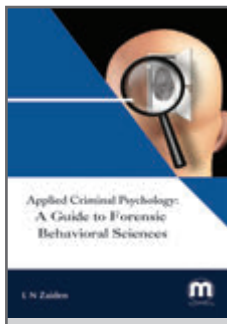


Feminist Counselling: Theory, Issues, and Practice

Editor: Elizabeth Yuan

To best understand the therapeutic and philosophical stance of feminist therapy, it is important to gain grounding in the sociopolitical factors that spurred consciousness and action among oppressed groups. This book explores concepts related to sex, gender, feminism and feminist psychology, multicultural diversity, and empowerment. It also provides a rationale for recognizing the field of counseling and therapy with women as a separate specialty. This practical guide is ideal for students and practitioners who wish to incorporate feminist therapy into their current approach, including how to apply feminist therapy to both women and men.

Print ISBN: 978-1-68250-578-6 | \$150 | 2019 | Hardcover

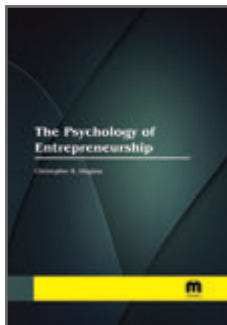


Applied Criminal Psychology: A Guide to Forensic Behavioral Sciences

Editor: L N Zaiden

The field of criminological psychology is so very important and salient in our daily life that it is indeed surprising and barely explicable that it has not been dealt with more prominently until recent times. Addressing both applied and theoretical issues, this comprehensive book offers contemporary insight on criminal behavior for graduate students and practitioners as well as policy makers' dealing with criminology and criminal justice, psychology, and related fields.

Print ISBN: 978-1-68250-579-3 | \$145 | 2019 | Hardcover

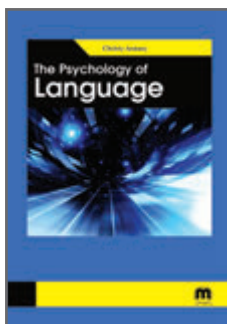


The Psychology of Entrepreneurship

Editor: Christopher R. Mugimu

This book offers a chronicle review of psychology of entrepreneurship research published in leading psychology journals, broadly corresponding with basic psychological domains, namely personal differences; careers; health and well-being; cognition and behavior; and leadership; as well as gender issues; genetic and biological foundations; and context. The studies of psychology over entrepreneurship have played an important role for a detailed consideration of the concept and in giving the concept the broader meaning that is used now. This book will be of interest for students, researchers, as well as entrepreneurs.

Print ISBN: 978-1-68250-487-1 | \$145 | 2018 | Hardcover

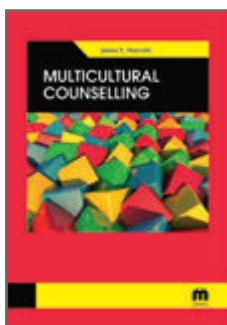


The Psychology of Language

Editor: Christy Antony

Language is a cognition that truly makes us human. Whereas other species do communicate with an innate ability to produce a limited number of meaningful vocalizations, or even with partially learned systems, there is no other species known to date that can express infinite ideas with a limited set of symbols. This book brings together different aspects of psychological studies on language and communication processes in children and adults, including language production and comprehension, cognitive and social bases of speech, nature and strategies of various types of discourse, development and disorders of linguistic, and communicative competences.

Print ISBN: 978-1-68250-488-8 | \$145 | 2018 | Hardcover

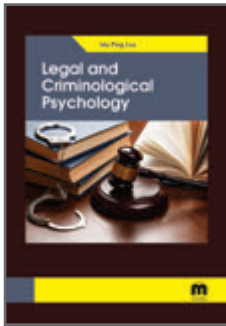


Multicultural Counselling

Editor: James Y. Marcelo

Multicultural counseling suggests that even in the counseling setting, differences between the client and counselor should be recognized. This collection introduces this crucial aspect by broadening your awareness and understanding of the key roles that a client's culture, identity, ethnicity, race, gender, and other aspects of diversity play in the counseling process. Learning culturally-competent counseling practices, current theoretical approaches, and practicing self-reflection in this area will help you acquire the skills necessary to engage a diverse clientele.

Print ISBN: 978-1-68250-489-5 | \$145 | 2018 | Hardcover



Legal and Criminological Psychology

Editor: Siu-Ping Lee

This book brings advance professional and scientific knowledge in the field of legal and criminological psychology, defined broadly as the application of psychology to law or interdisciplinary enquiry in legal and psychological fields. Criminal psychology is concerned with analyzing and improving the criminal justice system; enhancing police interviewing, detecting deception, or examining courtroom psychology and jury decision making. The study of imprisonment has taught us many important lessons about group behavior, conformity, and the ability of prisons to rehabilitate offenders.

Print ISBN: 978-1-68250-490-1 | \$145 | 2018 | Hardcover



Fundamentals of Educational and Counselling Psychology

Editor: V. Camus

Counselling psychology focuses on the emotional, social, vocational, educational, health-related, developmental, and organizational concerns as they promote personal and interpersonal functioning throughout life. Always sensitive to multicultural issues, counselling psychologists integrate theory, research and practice, to help people improve their wellbeing, alleviate distress and maladjustment, resolve crisis, and increase their ability to live more highly functioning lives. This book introduces these vital disciplines in teacher education curriculum and it is aimed at making the teaching and learning of the disciplines more effective and result oriented.

Print ISBN: 978-1-68250-313-3 | \$145 | 2017 | Hardcover

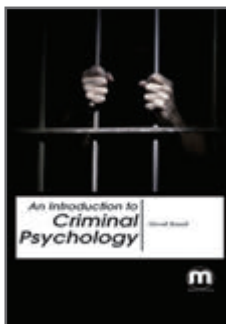


Modern Counselling Psychology

Editor: A. Borthwick

Counseling psychology, a specialty within the area broadly designated as applied psychology, is not primarily an entitative science but draws heavily upon the basic and applied fields of psychology and upon other behavioral sciences for its foundations. It uses concepts, tools, and techniques that are also used by other specialty groups—notably industrial and personnel, clinical, and school psychology. As such a specialty the most important characteristic of counseling psychology is its focus on the decisions and plans that individuals must make in order to play productive roles in their social environments. This book aims to consider how contemporary critiques of psychological practice impact upon the arena of counselling psychology and hence represent an important consideration for person-centred practitioners.

Print ISBN: 978-1-68250-314-0 | \$145 | 2017 | Hardcover



An Introduction to Criminal Psychology

Editor: Devid Russil

Criminal Psychology refers to the intersections of psychology, criminology and criminal justice. It studies offenders and offending behavior in order to improve the investigation of crime by adding a psychological component, such as in Offender Profiling. It also concerns the study of offender rehabilitation to establish what works in reducing re-offending. Additionally, criminal psychology is concerned with analyzing and improving the criminal justice system; enhancing police interviewing, detecting deception, or examining courtroom psychology and jury decision making. The study of imprisonment has taught us many important lessons about group behavior, conformity, and the ability of prisons to rehabilitate offenders. This book provides the reader with a comprehensive and practical guide to psychological research and techniques. The book should be of interest to students, academics, researchers and practitioners with an interest in criminal behavior.

Print ISBN: 978-1-68250-315-7 | \$140 | 2017 | Hardcover



Applying Psychology in Business

Editor: Eric Barker

Business psychology is an applied science that investigates how to make people and organisations more effective. It uses social scientific research methods to study people, workplaces and organisations in order to better align their multiple and sometimes competing needs. Its goal is to create healthy and productive relationships between people and organisations for mutual benefit. This book provides an accessible overview to the fundamental theories and frameworks that will help you understand human behaviour, emotions, and cognition at work. Both the understanding of human behavior and the skill in analysis of data provided by a major in psychology are very useful to students, practitioners, as well researchers interested in management and business.

Print ISBN: 978-1-68250-316-4 | \$150 | 2017 | Hardcover

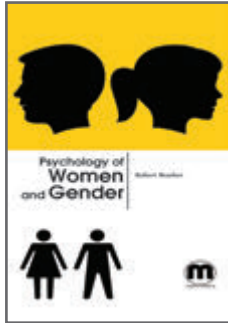


Business Psychology and Organisational Behaviour

Editor: W. Stefen

Business psychology is a young profession, with its roots in such diverse fields as organization development and learning, 'quality of working life', change-management, complex systems theory, human resource development, assessment, team building, group-facilitation and personal coaching. This book covers the main theories, approaches and ideas of organizational behavior. The book takes a practical, problem-solving approach to understanding the role of psychology in the workplace and focuses on employability skills that will benefit you in your future career. It benefits human resources professionals and other interested managers, academics, and specialists from other branches of psychology to provoke thought, add different perspectives and offer diverse experience.

Print ISBN: 978-1-68250-319-5 | \$145 | 2017 | Hardcover

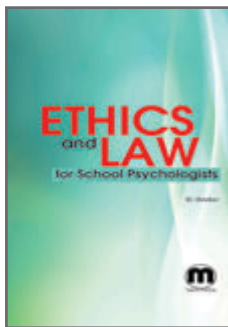


Psychology of Women and Gender

Editor: Robert Brasher

The "Psychology of Women" emerged as a field of study focusing on just those areas in which women most often butted against assumed roles. Feminine psychology is an approach to psychology that focuses on issues concerning gender, female human identity, and the issues that women face throughout their lives. This book features focused coverage of the major areas of the developmental, biological, social, and intrapersonal aspects of women and gender. This book will be of immense valuable for mental health researchers and practitioners, as well as scholars in an assortment of disciplines who want to stay current with the latest psychological/psychosocial thinking on women and gender.

Print ISBN: 978-1-68250-317-1 | \$145 | 2017 | Hardcover

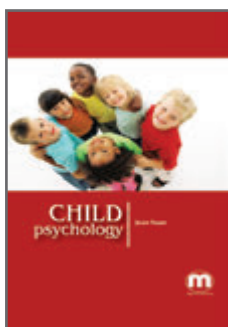


Ethics and Law for School Psychologists

Editor: D. Decker

Schools differ in their particular expectations of their students, but reliably expect that students are prepared to learn, will abide by the values of the institution and will accept consequences for behavioral indiscretions. The students in schools today have been brought up with a strong personal voice, are shaped by emotion rather than the cognition of the Baby Boomers generation, make decisions based strongly on peer influence, are 'digital natives', and seek new and exciting experiences. The primary task of the school psychologist is to counsel students about matters that impact on their academic progress. While this is a varied and psychologically diverse task, it would appear not overly complicated and is aimed at achieving the best possible educational outcomes for the student using focused generalist behavioral principles. This book is a comprehensive source of authoritative information on the ethical and legal issues for the delivery of school psychological services.

Print ISBN: 978-1-68250-318-8 | \$150 | 2017 | Hardcover

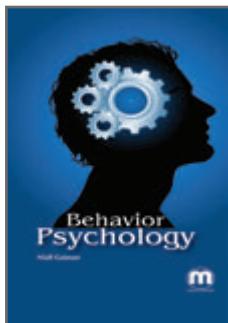


Child psychology

Editor: Jean Yuan

Child psychology is one of the many branches of psychology and one of the most frequently studied specialty areas. This specialized psychology branch focuses on the psychological processes of children from birth to adolescence. Child psychology is vast and one of the most commonly studied types of psychology, which is also called as child development. This book explores the factors within child psychology that are important when studying the development of children.

Print ISBN: 978-1-68250-320-1 | \$145 | 2017 | Hardcover

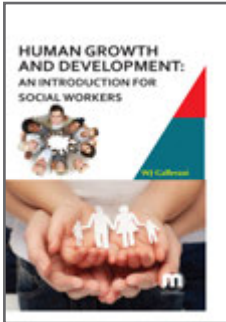


Behavior Psychology

Editor: Niall Gaiman

Behavioral psychology involves examining behavioral styles and providing therapy to correct any negative or destructive behaviors. Behavioral psychology is a branch of psychology that focuses on the study and alteration of people's behaviors, including their actions, emotions and thoughts. This book provides a unifying theoretical framework for applying new developments to the delivery of school psychological and educational services.

Print ISBN: 978-1-68250-321-8 | \$145 | 2017 | Hardcover

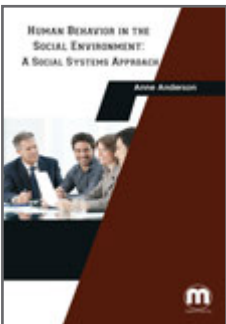


Human Growth and Development: An Introduction for Social Workers

Editor: WJ Gallerani

Early childhood development (ECD) programs have demonstrated drastic improvements in survival, growth, health, and social productivity. An understanding of the major theories and research related to the broad categories of physical development, cognitive development and social development is required, as is the ability to apply this knowledge. Focusing on human growth and development over the lifespan, this book will assist physicians, nurses, nutritionists, substance abuse counselors, clergy, teachers, career counselors, psychologists, and psychiatrists.

Print ISBN: 978-1-68250-580-9 | \$145 | 2019 | Hardcover

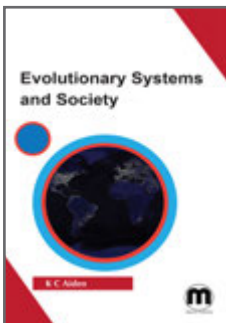


Human Behavior in the Social Environment: A Social Systems Approach

Editor: Anne Anderson

This book explores the impact of relationship contexts, social cognition, emotion, and human development. The book proposes that the validity and usefulness of psychological science will be enhanced by better integration of relationship contexts into theories and research. Exploring the conceptual foundations of the understanding human behavior and the social environment knowledge, this book will be of an ideal reference tool for students and practitioners.

Print ISBN: 978-1-68250-581-6 | \$145 | 2019 | Hardcover

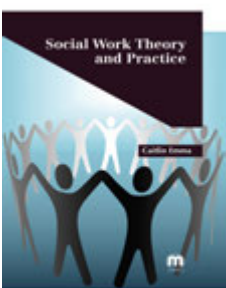


Evolutionary Systems and Society

Editor: K C Aiden

Evolutionary computation research frequently relies on the analysis of the time, and knows solutions or measures of the quality of solutions found as metrics for comparing different selection schemes, representations, and operators. This book explores how the diversity of species within communities affects adaptive evolution to a changing environment. This book presents insight into future research directions to provide a mechanistic understanding and predictive capability for community and ecosystem responses to environmental change.

Print ISBN: 978-1-68250-582-3 | \$150 | 2019 | Hardcover

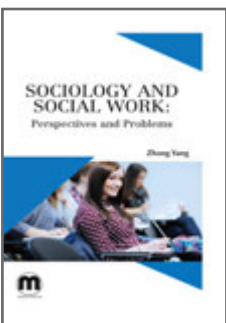


Social Work Theory and Practice

Editor: Caitlin Emma

Social work is life-changing work. But now, in the 21st century, social work itself needs to change so that it can match expectations for high quality, accessible, responsive and personalized services. This book discusses social policy and Social Work and the challenges that their relationship presents for professional intervention. An appealing guide for students as well as practitioners understands how theory impacts and informs social work practice across a range of contexts and with different service user groups.

Print ISBN: 978-1-68250-583-0 | \$145 | 2019 | Hardcover

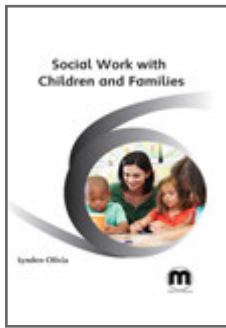


Sociology and Social Work: Perspectives and Problems

Editor: Zhong Yang

Social work research and evaluation continue to evolve as a mechanism that gathers data that can be used toward enhancing well-being and socially just outcomes. Portraying the sociology of social problems from interesting and challenging perspectives, this comprehensive book draws together the key contemporary theories, theorists, and perspectives used in social work and explain how they are applied in practice and critiqued by social workers.

Print ISBN: 978-1-68250-584-7 | \$150 | 2019 | Hardcover

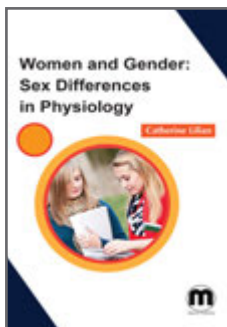


Social Work with Children and Families

Editor: Lynden Olivia

Over the last few years, an exponential growth of policy focused on children and young people has emerged. Covering theory and research to actual practice through the use of case studies and real-world examples for good practice and further research, the focus of this book will be the intersection of law, policy implementation, and social work in child and family protection. An invaluable resource for practitioners and academics across the field of social welfare, particularly for those embarking on or already involved in, child and family assessment.

Print ISBN: 978-1-68250-585-4 | \$145 | 2019 | Hardcover



Women and Gender: Sex Differences in Physiology

Editor: Catherine Lilian

The similarities and differences between women and men in their ways of thinking, feeling, and behaving have been, and still are today, a topic of great fascination for laypersons and experts alike. This book covers state of the art in the psychology of women, the psychology of men, and gender differences while discussing psychological differences in personality, cognition, and behavior, as well as biologically based differences and how those differences impact behavior. This book is an all-encompassing reference that covers into sex differences in all physiological fields.

Print ISBN: 978-1-68250-586-1 | \$150 | 2019 | Hardcover

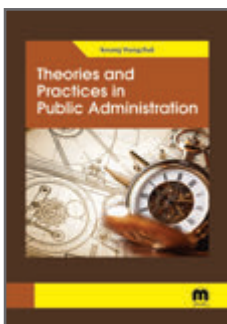


Environment and Society: Sustainability, Policy and the Citizen

Editor: Pamela Brayden

The economic growth reflects the urgency of consideration and the pace and scale of change with respect to the water crisis, deforestation, biodiversity loss, and environmental justice, which are just some of the many compelling challenges facing society today and in the future. The book focuses on environmental studies, together with subjects of theoretical, methodological, substantive, and applied significance. Coverage includes interactions among society, development and environment, and their implications for sustainable development; technical, economic, ethical and philosophical aspects of sustainable development; local, regional and global sustainability and their practical implementation.

Print ISBN: 978-1-68250-587-8 | \$145 | 2019 | Hardcover



Theories and Practices in Public Administration

Editor: Kesang Wangchuk

Recent globalization trends, the computer and communications revolution, easy movement across borders of professional and technical personnel, data, information and technology, have had a significant impact on the practice of public administration. This work is intended to provide an overview and a comparative perspective on public administration in developing countries and particularly, the evolution of administrative problems, practices and strategies. This book will appeal to public administration professionals, training and research institutions, and those interested in public administration systems and dynamics.

Print ISBN: 978-1-68250-439-0 | \$145 | 2018 | Hardcover

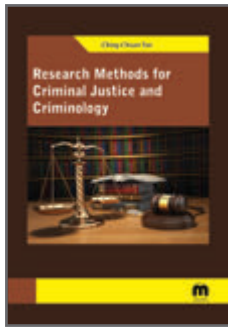


Research Methods in Public Administration and Public Management

Editor: Nizar Alrabadi

Achieving the necessary standard of public administration requires reforms in many areas of policy and administration. When planned and implemented on a fragmented and ad hoc basis, reforms may not transform the governance system and overall functioning of public administration as expected. Achieving results requires the Government to steer and co-ordinate the implementation of an overall reform vision and prioritized objectives. This book is a critical appreciation of empirical research about public administration. It is a critique of the methods used in measurement practices, data collection, and confidence in findings.

Print ISBN: 978-1-68250-440-6 | \$145 | 2018 | Hardcover

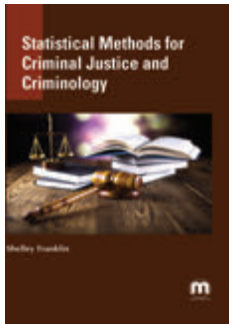


Research Methods for Criminal Justice and Criminology

Editor: Ching-Chuan Tan

This comprehensive guide will equip readers with an advanced understanding of crime and criminal justice, comprising courses in criminological theory, the study of criminal justice, and training in research design and methodology. It continues to demonstrate the vital role research plays by integrating in-depth, real-world case studies with a comprehensive discussion of research methods. This general but all-important background serves as a base for the areas of emphasis that are of interest to the students and researchers.

Print ISBN: 978-1-68250-441-3 | \$145 | 2018 | Hardcover



Statistical Methods for Criminal Justice and Criminology

Editor: Shelley Franklin

Statistical methods are useful for research purposes and also play an important role in discovering crime trends so that preventative measures may be taken to curb different criminal behavior and activity. This book emphasizes the application and interpretation of statistics in research in crime and justice. This work will be of immense interest for both students and researchers who want to gain a basic understanding of common statistical methods used in this field.

Print ISBN: 978-1-68250-442-0 | \$145 | 2018 | Hardcover

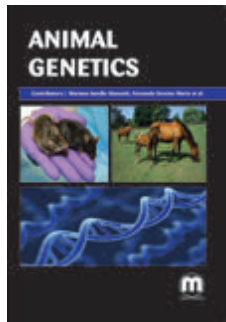


Genetically Modified Animals

Contributors: Alaine C. Keebaugh, Heather A. Mitchell et al.

Genetic modification is a powerful tool in biotechnology research and application. Genetic modification in animals has seen many exciting developments in recent years as technologies have become more efficient and cost effective and novel approaches emerged. This book presents specific genetic approaches, methods, and applications of biotechnology in key species including poultry, fish, and large animals.

Print ISBN: 9781682502198 | \$ 170 | 2016 | Hardcover



Animal Genetics

Contributors: Mariana Ianello Giassetti, Fernanda Sevcic Maria et al.

Animal genetics is a branch of genetics that studies heredity and variation chiefly in farm animals but also in domestic and wild animals. It is based on general genetic principles and concepts, and it mainly uses the hybrid, cytological, population, ontogenetic, mathematical-statistical, and twin methods of general genetics. The book provides a comprehensive introduction to genetic principles and their applications in animal breeding and useful for those new to the field of animal genetics this book also covering a diverse array of topics ranging from population and quantitative genetics.

Print ISBN: 9781682502204 | \$ 170 | 2016 | Hardcover